DOCUMENT RESUME

ED 350 457 CE 062 139

TITLE	Surgical Technology Program Guide.
INSTITUTION	Georgia Univ., Athens. Dept. of Vocational Education.
SPONS AGENCY	Georgia State Dept. of Technical and Adult Education, Atlanta.
PUB DATE	90
CONTRACT	GA-89-110013
NOTE	163p.; For the program standards, see CE 062 140.
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	*Allied Health Occupations Education; *Behavioral Objectives; Competency Based Education; *Course Content; Course Descriptions; Employment Potential; Entry Workers; Job Skills; Medical Services; Postsecondary Education; Program Guides; State Curriculum Guides; Surgery; *Surgical Technicians; Technical Education; Technical Institutes; Two Year Colleges
IDENTIFIERS	Georgia

ABSTRACT

This surgical technology program guide presents the standard curriculum for technical institutes in Georgia. The curriculum addresses the minimum competencies for a surgical technology program. The program guide is designed to relate primarily to the development of those skills needed by individuals in the field to provide services in the operating room under the supervision and responsibility of the operating room supervisor, who is a registered nurse. The general information section contains purpose and objectives; program description, including admissions, typical job titles, and accreditation and certification; and curriculum model, including standard curriculum sequence and lists of courses. The next three sections contain the courses: three general core courses (English, general mathematics, interpersonal relations and professional development); four fundamental technical courses (anatomy and physiology, introduction to surgical technology, principles of surgical technology, introductory surgical practicum); and five specific technical courses (surgical procedures I and II, specialty surgical practicum, advanced specialty surgical practicum, seminar in surgical technology). Each course consists of the following: course overview (description, competency areas, prerequisites, credit hours, contact hours); course outline with student objectives and class and lab hours; and resource list. An equipment list is appended. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

GEORGIA DEPARTMENT OF TECHNICAL AND
ADULT EDUCATION GA89CD02
FY 89
CONTRACT # 89-110013

GEORGIA DEPARTMENT OF TECHNICAL AND ADULT EDUCATION

ED350457

SURGICAL TECHNOLOGY PROGRAM GUIDE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

G Morrison

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE062139

BEST COPY AVAILABLE

SURGICAL TECHNOLOGY PROGRAM GUIDE

Developed and Produced
Under Contractual Agreement with

Office of Technical Education
Department of Technical and Adult Education
Suite 660 South Tower
One CNN Center
Atlanta, Georgia 30303-2705
1990

SURGICAL TECHNOLOGY PROGRAM GUIDE

Dr. Sheila S. Squires
and
Ted Brown,
Surgical Technology
Program Guide Development Directors

College of Education
Division of Adult, Business, and Vocational Education
University of Georgia
Athens, Georgia

Dr. Richard L. Lynch, Division Chair
Ted Brown, Project Coordinator
Genet Kibreab, Publications Specialist

ACKNOWLEDGEMENTS

The project staff expresses its sincere appreciation to the Georgia Department of Technical and Adult Education, the surgical technology profession, and the state's technical institutes for their contribution to the development of this program guide. Kenneth Breeden and Robert Mabry of the Department of Technical and Adult Education provided initiative and direction for the project. Patt Stonehouse, Director of Instructional Services for the Department of Technical and Adult Education, provided invaluable assistance in the planning and monitoring of the project.

Without the close cooperation of members of the surgical technology profession in Georgia, this program guide would not have been possible. The Surgical Technology State Technical Committee provided overall direction, identified areas of concern, provided occupational outlook and equipment recommendations, participated in task analysis review, and reviewed the curriculum in this guide. We would like to recognize each member of the Surgical Technology State Technical Committee below.

Joan Adams
Clarkston

Jackie Anderson
DeKalb General Hospital

Judy Benoff
Gwinnett Medical Center

Willin Callins
Decatur

Margie Clements
South Georgia Medical Center

Carol Feuger
Memorial Medical Center

Loyce Harrison
Cataula

Connie Houston
Lawrenceville

Linda Kautzman
South Georgia Medical Center

Larry L. Medders
Athens

Micky O'Connell
Waycross

Greg Patterson
Snellville

Kathleen Smith
Athens Regional Medical Center

James Sparks
Lawrenceville

Joyce Trout
St. Francis Hospital

Judy Voorhees
Lawrenceville

Margaret Webb
Doctor's Hospital

Laura Wilson
St. Mary's Hospital

Linda Wilson
Memorial Hospital

The Occupational Working Committee, composed of personnel from the technical institutes and other educational institutions, provided direct technical support and expertise in the development of the program guides. The members of this committee made the success of this endeavor possible. We would like to recognize the educators who participated on the Surgical Technology Occupational Working Committee below.

Terri Baxter
DeKalb Technical Institute

Emily Boegli
Savannah Technical Institute

Connie Cooper
Columbus Technical Institute

Dorothy E. Cox
Valdosta Technical Institute

Kim Eckert
Columbus Technical Institute

Lupé Fernandez
DeKalb Technical Institute

Deborah Hamrick
Gwinnett Area Technical Institute

Frances Johnston
DeKalb Technical Institute

Margaret Jones
Columbus Technical Institute

Pat Knox
Okeefenokee Technical Institute

Mary Ann Parker
Savannah Technical Institute

Kathy Pate
Albany Technical Institute

Beth Varnadoe
Athens Technical Institute

We would like to thank all the other business, industry, and educational leaders who contributed to the development of the program guide. We would also like to thank Hoyt Sappé for research, Claire Thompson for communications, Lois Brown and Lee Burket for editorial assistance, and Melissa Griffin and Rhonda Farmer for electronic publishing assistance.

TABLE OF CONTENTS

TAB/SECTION	SUBJECT	LOCATION
GENERAL INFORMATION		**01**
Introduction	Overview	01-01-01
	Standard Curriculum	01-01-02
	Developmental Process	01-01-03
	Purpose and Objectives	01-01-04
Program Description	Program Defined	01-02-01
	Admissions	01-02-02
	Typical Job Titles	01-02-03
	Accreditation/Certification	01-02-04
Curriculum Model	Standard Curriculum	01-03-01
	General Core Courses	01-03-02
	Fundamental Technical Courses	01-03-03
	Specific Technical Courses	01-03-04
	Electives	01-03-05
GENERAL CORE COURSES		**02**
ENG 101 English	Course Overview	02-01-01
	Course Outline	02-01-02
	Resources	02-01-03
MAT 101 General Mathematics	Course Overview	02-02-01
	Course Outline	02-02-02
	Resources	02-02-03
PSY 100 Interpersonal Relations and Professional Development	Course Overview	02-03-01
	Course Outline	02-03-02
	Resources	02-03-03

TAB/SECTION		SUBJECT	LOCATION
FUNDAMENTAL TECHNICAL COURSES			**03**
AHS 101	Anatomy and Physiology	Course Overview	03-01-01
		Course Outline	03-01-02
		Resources	03-01-03
SUR 101	Introduction to Surgical Technology	Course Overview	03-02-01
		Course Outline	03-02-02
		Resources	03-02-03
SUR 102	Principles of Surgical Technology	Course Overview	03-03-01
		Course Outline	03-03-02
		Resources	03-03-03
SUR 112	Introductory Surgical Practicum	Course Overview	03-04-01
		Course Outline	03-04-02
		Resources	03-04-03
SPECIFIC TECHNICAL COURSES			**04**
SUR 103	Surgical Procedures I	Course Overview	04-01-01
		Course Outline	04-01-02
		Resources	04-01-03
SUR 104	Surgical Procedures II	Course Overview	04-02-01
		Course Outline	04-02-02
		Resources	04-02-03
SUR 113	Specialty Surgical Practicum	Course Overview	04-03-01
		Course Outline	04-03-02
		Resources	04-03-03
SUR 114	Advanced Specialty Surgical Practicum	Course Overview	04-04-01
		Course Outline	04-04-02
		Resources	04-04-03

TAB/SECTION	SUBJECT	LOCATION
SUR 124 Seminar in Surgical Technology	Course Overview	04-05-01
	Course Outline	04-05-02
	Resources	04-05-03
APPENDICES		**99**
Appendix A	Equipment List	99-01-01

HOW TO USE THIS MANUAL

Summary

This manual is divided into:

Tabs - major divisions, physically separated by numbered tab dividers

Sections - divisions within a tab

Subjects - divisions within a section

Numbering System

Each document (Subject) has a unique 6-digit number. This number is divided into 3 sets of 2 digits which are separated by dashes.

Example:	04	-	02	-	03
	TAB		SECTION		SUBJECT

Locating a Document

Document numbers appear on the upper right hand corner of each page (see top of this page). To locate a subject:

1. Refer to the Table of Contents.
2. Note the document number for the subject.

   Example: 04-02-03

3. Turn to the tab divider marked 04 and within this tab find Section 02 and Subject 03.

Table of Contents

The table of contents (00-00-01) is intended to give a cover-to-cover overview of the manual contents and organization. It lists contents of a Tab to the Section and Subject level.

Amendments

Registered manual holders are instructed to keep their manuals up-to-date.

Manuals Document Transmittal	All new or revised documents are sent to the registered holder of the manual and are recorded on a Manuals Document Transmittal Form. Transmittals are numbered consecutively, and instructions for use are printed on the form.
Amendment Record	The registered holder of the manual records the receipt of all manual document transmittals on the Amendment Record. This record and instructions are found on the reverse side of the manual title page.

GENERAL INFORMATION

Introduction

Overview

Surgical Technology is a program of study which is consistent with the philosophy and purpose of the institution. The program provides academic foundations in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are well trained in the underlying fundamentals of surgical technology and are well prepared for employment and subsequent upward mobility.

The Surgical Technology program is a specialized training program that provides the student with the knowledge and skills to become a competent surgical technician in the modern surgical technology profession. Skills application plays a vital role in the comprehensive Surgical Technology program. Important attributes of successful program graduates are critical thinking, problem solving, and the ability to apply technology to the work requirement. This field has experienced rapid expansion and the trend is expected to continue for the foreseeable future.

The program structure acknowledges individual differences and provides opportunities for students to seek fulfillment of their respective educational goals. The program does not discriminate on the basis of race, color, national origin, religion, sex, handicapping condition, academic or economic disadvantage.

To assist each student to attain his or her respective potential within the program, both the instructor and the student incur an obligation in the learning process. The instructor is a manager of instructional resources and organizes instruction in a manner which promotes learning. The student assumes responsibility for learning by actively participating in the learning process.

This is a dynamic field which requires extraordinary attention to current curriculum and up-to-date instructional equipment, materials, and processes. The Surgical Technology program must promote the concept of change as the profession evolves. The need for nurturing the spirit of involvement and lifelong learning is paramount in the surgical technology profession.

GENERAL INFORMATION

Introduction

Standard Curriculum

The Surgical Technology program guide presents the standard surgical technology curriculum for technical institutes in Georgia. This curriculum addresses the minimum competencies for the Surgical Technology program. The competency areas included in a local Surgical Technology program may exceed what is contained in this program guide, but it must encompass the minimum competencies contained herein.

As changes occur in the Surgical Technology program, this guide will be revised to reflect those changes. Proposed changes are first evaluated and approved by the local program advisory committee and then forwarded to the State Technical Committee for approval and inclusion in the state standard program guide.

This program guide is designed to relate primarily to the development of those skills needed by individuals in the field to provide services in the operating room under the supervision and responsibility of the operating room supervisor, who is a registered nurse.

GENERAL INFORMATION

Introduction

Developmental Process

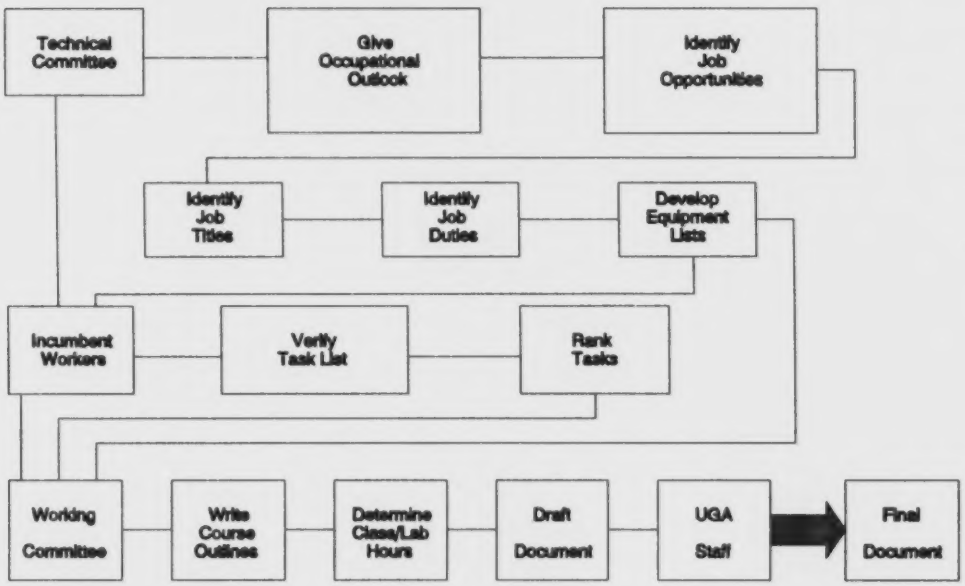
The development of the Surgical Technology program guide was based on the premise that the people in the industry can best determine program needs. With this in mind, representatives from businesses which would employ program graduates were asked to serve on a State Technical Committee to help identify the technical content and to provide overall guidance to ensure that the resulting program would produce graduates qualified for entry-level technical positions in the industry.

The State Technical committee verified an occupational task list that had been complied through extensive research. These representatives included workers who had actually performed the duties and tasks being verified.

Technical institutes which would implement the curriculum were also included in the developmental effort. Representatives from the technical institutes provided the expertise in teaching methodology unique to each discipline and developed the courses contained in this program guide.

The University of Georgia coordinated and directed the development of the curriculum and produced the final program guide. The role of each group in the developmental process is shown in the diagram on the following page.

DATA/PROCESS FLOW DIAGRAM



GENERAL INFORMATION

Introduction

Purpose and Objectives

Purpose

The purpose of the Surgical Technology program is to provide educational opportunities to individuals that will enable them to obtain the knowledge, skills, and attitudes necessary to succeed in the surgical technology profession.

The Surgical Technology program provides educational opportunities regardless of race, color, national origin, religion, sex, age, handicapping condition, academic disadvantage, or economic disadvantage.

The Surgical Technology program is intended to produce graduates who are prepared for employment as surgical technicians. Program graduates are to be competent in the general areas of communications, math, and professional relations.

Graduates are to be competent as skilled surgical technologists, qualified by didactic and clinical training, to provide services in the operating room under the supervision and responsibility of the operating room supervisor, who is a registered nurse.

Graduates are prepared to function in association with nurses and surgeons to help provide the best possible care of the surgical patient. They function as a part of the operating room team responsible for the cleanliness, safety, and efficiency of the operating room that leads to good patient care. Their experience with aseptic surgical techniques qualifies them to prepare materials for use at the operating table and to assist in the use of these materials.

The surgical technologist demonstrates an ability to relate to people, an orientation towards service to people, and a capacity for calm and reasoned judgment in meeting emergencies. Respect for the patient as a person and respect for the patient's privacy are expected of the technologist.

Objectives

1. Provide current curriculum, instructional materials, and equipment (in accordance with available funding) which teach knowledge, skills, and attitudes appropriate to industry needs.

2. Provide educational facilities which foster learning and provide safe, healthy environments available and accessible to all students who can benefit from the program.

3. Provide academic instruction which supports effective learning within the program and which enhances professional performance on the job.

4. Provide employability skills which foster work attitudes and work habits that will enable graduates of the program to perform as good employees.

5. Nurture the desire for learning so that graduates will pursue their own continuing education as a lifelong endeavor.

6. Provide an educational atmosphere which promotes a positive self-image and a sense of personal well-being.

7. Provide education that fosters development of good safety habits.

8. Provide admission, educational, and placement services without regard to race, color, national origin, religion, sex, age, or handicapping condition.

9. Provide information to the public regarding the program that will facilitate recruitment and enrollment of students.

10. Promote good public relations via contacts and regular communications with business, industry, and the public sector.

11. Promote faculty and student rapport and communications to enhance student success in the program.

GENERAL INFORMATION

Program Description

Program Defined

The Surgical Technology accredited program prepares students for employment in a variety of positions in today's surgical technology profession. The Surgical Technology program provides learning opportunities which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Graduates of the program receive a Surgical Technology diploma and are eligible to sit for a national certification examination.

GENERAL INFORMATION

Program Description

Admissions

Admissions Requirements

Admission of new students to the Surgical Technology program is contingent upon their meeting all of the following requirements:

a) attainment of 17 or more years of age;
b) achievement of the 8th grade level in math, reading, and English as shown on a statistically validated test;
c) documentation of a physician's examination;
d) submission of an immunization record; and
e) completion of application and related procedures.

Admission of transfer students is contingent upon their meeting the following:

a) regular admission and good standing at a regionally accredited diploma or degree granting institution; and
b) proper completion of application and related procedures.

Provisional Admission

A new student who does not meet the regular admission requirements of the program may be admitted on a provisional basis. The requirements for provisional admission are:

a) attainment of 17 or more years of age;
b) achievement of the 7th grade level in math, reading, and English as shown on a statistically validated test; and
c) completion of application and related procedures.

GENERAL INFORMATION

Program Description

Typical Job Titles

The Surgical Technology program is assigned a (PGM) CIP code of (PGM) 17.0211 and is consistent with all other programs throughout the state which have the same (PGM) CIP code. The related D.O.T. job title follows:

079.374-022	Surgical Technician

GENERAL INFORMATION

Program Description

Accreditation and Certification

This program must conform to the institutional accreditation requirements of the Southern Association of Colleges and Schools by meeting Commission on Colleges (COC) or Commission on Occupational Education Institutions (COEI) accreditation requirements and must not conflict with the accreditation criteria established by COC and COEI.

This program must meet the requirements stated in the *Essentials of an Accredited Educational Program for the Surgical Technologist.*

Surgical programs are accredited by the Committee on Allied Health Education and Accreditation of the American Medical Association and the Accreditation Review Committee for Educational Programs in Surgical Technology.

GENERAL INFORMATION

Curriculum Model

Standard Curriculum

The standard curriculum for the Surgical Technology program is set up on the quarter system. Technical institutes may implement the Surgical Technology program by using one of the sequences listed below or by using a locally developed sequence designed to reflect course prerequisites and/or corequisites.

Course			Class Hours	Lab Hours	Weekly Contact Hours	Credits
SUGGESTED SEQUENCE I						
FIRST QUARTER						
AHS	101	Anatomy and Physiology	5	0	5	5
ENG	101	English	5	0	5	5
MAT	101	General Mathematics	5	0	5	5
SUR	101	Introduction to Surgical Technology	6	4	10	8
XXX	xxx	Electives	-	-	-	3
			21	4	25	26
SECOND QUARTER						
PSY	100	Interpersonal Relations and Professional Development	3	0	3	3
SUR	102	Principles of Surgical Technology	6	4	10	8
SUR	112	Introductory Surgical Practicum	0	21	21	7
			9	25	34	18

Course	Class Hours	Lab Hours	Weekly Contact Hours	Credits
THIRD QUARTER				
SUR 103 Surgical Procedures I	8	2	10	9
SUR 113 Specialty Surgery Practicum	0	24	24	8
	8	26	34	17
FOURTH QUARTER				
SUR 104 Surgical Procedures II	5	2	7	6
SUR 114 Advanced Specialty Surgical Practicum	0	24	24	8
SUR 124 Seminar in Surgical Technology	3	0	3	3
	8	26	34	17

Course	Class Hours	Lab Hours	Weekly Contact Hours	Credits
SUGGESTED SEQUENCE II				
FIRST QUARTER				
AHS 101 Anatomy and Physiology	5	0	5	5
MAT 101 General Mathematics	5	0	5	5
XXX xxx Electives	-	-	-	3
	10	0	10	13
SECOND QUARTER				
ENG 101 English	5	0	5	5
PSY 100 Interpersonal Relations and Professional Development	3	0	3	3
SUR 101 Introduction to Surgical Technology	6	4	10	8
	14	4	18	16
THIRD QUARTER				
SUR 102 Principles of Surgical Technology	6	4	10	8
SUR 112 Introductory Surgical Practicum	0	21	21	7
	6	25	31	15
FOURTH QUARTER				
SUR 103 Surgical Procedures I	8	2	10	9
SUR 113 Specialty Surgery Practicum	0	24	24	8
	8	26	34	17

Course	Class Hours	Lab Hours	Weekly Contact Hours	Credits
FIFTH QUARTER				
SUR 104 Surgical Procedures II	5	2	7	6
SUR 114 Advanced Specialty Surgical Practicum	0	24	24	8
SUR 124 Seminar in Surgical Technology	3	0	3	3
	8	26	34	17

GENERAL INFORMATION

Curriculum Model

General Core Courses

The general core courses provide students with a foundation in the basic skills which enable them to express themselves more clearly, both orally and in writing, and to perform the mathematical functions required in this occupation. The general core courses for the Surgical Technology program are listed below.

ENG	101	English	5 Credits
MAT	101	General Mathematics	5 Credits
PSY	100	Interpersonal Relations and Professional Development	3 Credits

GENERAL INFORMATION

Curriculum Model

Fundamental Technical Courses

The fundamental technical courses provide students with a foundation in the area of surgical technology which is needed to progress to the more highly specialized courses in surgical technology. The fundamental technical courses are listed below.

AHS	101	Anatomy and Physiology	5 Credits
SUR	101	Introduction to Surgical Technology	8 Credits
SUR	102	Principles of Surgical Technology	8 Credits
SUR	112	Introductory Surgical Practicum	7 Credits

GENERAL INFORMATION

Curriculum Model

Specific Technical Courses

The specific technical courses build upon the fundamental technical courses to provide students with the basic knowledge and skill required to work as surgical technicians. The specific technical courses offered in the Surgical Technology program are listed below.

SUR	103	Surgical Procedures I	9 Credits
SUR	104	Surgical Procedures II	6 Credits
SUR	113	Specialty Surgical Practicum	8 Credits
SUR	114	Advanced Specialty Surgical Practicum	8 Credits
SUR	124	Seminar in Surgical Technology	3 Credits

GENERAL INFORMATION

Curriculum Model

Electives

Elective courses are provided to allow for the different levels of prior knowledge and skills brought to the classroom by students with diverse backgrounds, educational attainment, and specialized interests.

Decisions regarding the selection and appropriateness of any elective are made by the student after consultation with the instructor. Provision must be made for electives chosen from disciplines outside the student's area of specialization.

XXX xxx Electives 3 Credits

GENERAL CORE

ENG 101 - English

Course Overview

Course Description

Emphasizes the development and improvement of written and oral communication abilities. Topics include: analysis of writing techniques used in selected readings, writing practice, editing and proofreading, research skills, and oral presentation skills. Homework assignments reinforce classroom learning.

Competency Areas

Analysis of Writing Techniques
Used in Selected Readings
Writing Practice
Editing and Proofreading
Research Skills
Oral Presentation Skills

Prerequisite

Program admission level English and reading competency

Credit Hours

5

Contact Hours Per Week

Class - 5

Lab - 0

GENERAL CORE

ENG 101 - English

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
ANALYSIS OF WRITING TECHNIQUES USED IN SELECTED READINGS		**10**	**0**
Review and analysis of various writing techniques	Read and analyze writing to identify subject and focus. Read and analyze writing to identify supporting information. Read and analyze writing to identify patterns of development, such as time, space, climax, example, process, instructions, definition, comparison/ contrast, cause and effect, classification, and problem-solving.		
WRITING PRACTICE		**20**	**0**
Review of grammar fundamentals	Produce logically organized, grammatically acceptable writing.		
Review of composition fundamentals	Compose a variety of paragraphs, reports, memoranda, and business letters. Demonstrate listening skills by following directions for writing assignments.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
EDITING AND PROOFREADING		**10**	**0**
Review of editing fundamentals	Revise to improve ideas, style, organization, and format, preferably with word processing. Edit to improve grammar, mechanics, and spelling.		
RESEARCH SKILLS		**5**	**0**
Resource materials location and utilization	Utilize library resources to enhance writing.		
ORAL PRESENTATION SKILLS		**5**	**0**
Types of oral presentation participation	Participate in class discussion, small group discussion, and/or individual presentations.		
Role of the listener	Participate as an active listener.		

GENERAL CORE

ENG 101 - English

Resources

Lewis, S. D., Smith, H., Baker, F., Ellegood, G., Kopay, C., & Tanzer, W. (1988). *Writing skills for technical students* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.

Van Alstyne, J. S. (1986). *Professional and technical writing strategies*. Englewood Cliffs, NJ: Prentice Hall.

GENERAL CORE

MAT 101 - General Mathematics

Course Overview

Course Description

Emphasizes mathematical skills that can be applied to the solution of occupational/technical problems. Topics include: properties of numbers, fractions, decimals, percents, ratio/proportion, measurement and conversions, exponents, and geometric and technical formulas. Class includes lectures, applications, and homework to reinforce learning.

Competency Areas

Properties of Numbers
Fractions
Decimals
Percents
Ratio/Proportion
Measurement/Conversions
Exponents and Radicals
Geometric and Technical Formulas

Prerequisite

Program admission level math competency

Credit Hours

5

Contact Hours Per Week

Class - 5

Lab - 0

GENERAL CORE

MAT 101 - General Mathematics

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
PROPERTIES OF NUMBERS		**5**	**0**
Whole numbers	Identify prime and composite numbers.		
	Solve whole number problems using mathematical operations of addition, subtraction, multiplication, division, and powers.		
FRACTIONS		**10**	**0**
Definition of fractions	Define a fraction.		
	Identify proper, improper, and mixed fractions.		
Equivalent fractions	Solve problems relating to equivalent fractions.		
Mathematical operations using fractions	Solve problems requiring multiplication, division, addition, and subtraction of fractions.		
DECIMALS		**5**	**0**
Definition of decimals and place value	Perform mathematical operations using decimals.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
Basic operations of mathematics with decimals	Solve problems using decimals, scientific notation, and powers of ten.		
Conversion of fractions to decimals and decimals to fractions			
Powers of ten			
PERCENTS		**5**	**0**
Definition of percents	Work problems using percents dealing with mixtures and interests.		
Conversion between fractions and decimals			
Base-rate-part problems			
Mixture and interest			
RATIO/PROPORTION		**10**	**0**
Definition of rate, ratio, and proportions	Construct and solve problems involving ratios and proportions.		
Variation: direct and inverse	Identify, setup, and solve proportionality problems.		
Measurement and conversion	Solve problems and applications in measurement and conversions.		
Definition of basic units of measurement	Use dimensioning.		
	Convert between measurement systems.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
EXPONENTS AND RADICALS		**5**	**0**
Laws of exponents	Apply laws of exponents to simplify complex exponents expressions.		
Radicals	Find roots of numbers.		
GEOMETRIC AND TECHNICAL FORMULAS		**10**	**0**
Types of formulas	Identify basic two and three dimensional figures.		
	Find the areas of rectangular and circular figures.		
	Solve for volumes of cubes, rectangular solids, and right circular cylinders.		
	Identify, measure, and solve problems using angles.		
	Solve and manipulate basic algebraic and trigonometric formulas.		

GENERAL CORE

MAT 101 - General Mathematics

Resources

Harter, J. J., & Beitzel, W. D. (1988). *Mathematics applied to electronics* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Heywood, A. H. (1982). *Arithmetic: A programmed worktext* (4th ed.). Monterey, CA: Brooks/Cole.

Johnston, C. L., Willis, A. T., & Hughes, G. M. (1988). *Essential arithmetic* (5th ed.). Belmont, CA: Wadsworth.

Keedy, M. L., & Bittinger, M. L. (1986). *Introductory algebra* (5th ed.). Perdue, IN: Addison-Wesley.

Keedy, M. L., & Bittinger, M. L. (1987). *Essential mathematics* (5th ed.). Perdue, IN: Addison-Wesley.

Lewis, H. (1986). *Technical mathematics.* Albany, NY: Delmar.

Palmer, C. I., & Mrachek, L. A. (1985). *Practical mathematics* (7th ed.). Minneapolis: McGraw-Hill.

Proga, R. (1987). *Basic math* (2nd ed.). Boston: Prindle, Weber & Schmidt.

Washington, A. J., & Triola, M. F. (1984). *Introduction to technical mathematics* (4th ed.). Poughkeepsie, NY: Benjamin-Cummings.

GENERAL CORE

PSY 100 - Interpersonal Relations and Professional Development

Course Overview

Course Description

Provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include: personal skills required for understanding of self and others; projecting a professional image; job acquisition skills such as conducting a job search, interviewing techniques, job application, and resume preparation; desirable job performance skills; and desirable attitudes necessary for job retention and advancement.

Competency Areas

Human Relations Skills
Job Acquisition Skills
Job Retention Skills
Job Advancement Skills
Professional Image Skills

Prerequisite

Provisional admission

Credit Hours

3

Contact Hours Per Week

Class - 3

Lab - 0

GENERAL CORE

PSY 100 - Interpersonal Relations and Professional Development

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
HUMAN RELATIONS SKILLS		**6**	**0**
Goal setting	Develop and set personal goals.		
Stress management	Diagnose and respond to own stress level.		
Behavior problems	Identify strategies to handle difficult behaviors effectively.		
Personal introductions	Make proper introductions.		
Problem solving/decision making	Identify strategies to solve problems/make decisions.		
JOB ACQUISITION SKILLS		**15**	**0**
Job search	Identify strategies to conduct a job search.		
Career goals	Develop and set career goals.		
Employment documents	Prepare letter of application.		
	Prepare resume/applications.		
	Prepare follow-up letters.		
Interviewing	Demonstrate interviewing techniques.		

Recommended Outline	After completing this section, the student will:	Hours Class	Lab
JOB RETENTION SKILLS		**3**	**0**
Office relationships	Identify techniques used to work effectively with co-workers.		
Time management	Develop time management strategies.		
JOB ADVANCEMENT SKILLS		**3**	**0**
Performance appraisal	Demonstrate ability to accept counseling positively.		
	Demonstrate ability to negotiate promotion/salary increase.		
Supervisory chain	Explain chain of responsibility.		
PROFESSIONAL IMAGE SKILLS		**3**	**0**
Image	Project professional image.		
Attitude	Project professional attitude.		

GENERAL CORE

PSY 100 - Interpersonal Relations and Professional Development

Resources

DuBrin, A. J. (1988). *Human relations--A job oriented approach* (4th ed.). Englewood Cliffs, NJ: Prentice Hall.

Milton, C. R. (1981). *Human behavior in organizations: Three levels of behavior.* Englewood Cliffs, NJ: Prentice Hall.

Reynolds, C. (1988). *Dimensions in professional development* (3rd ed.). Cincinnati: South-Western.

Rogers, C. R. (1981). *Human behavior in organizations*. Cincinnati: South-Western.

Wilkes, M., & Crosswait, C. B. (1986). *Professional development--The dynamics of success* (3rd ed.). Atlanta: Harcourt Brace Jovanovich.

Williams, C. J., & Huber, G. P. (1986). *Human behavior in organizations* (3rd ed.). Cincinnati: South-Western.

FUNDAMENTAL TECHNICAL

AHS 101 - Anatomy and Physiology

Course Overview

Course Description

Focuses on basic normal structure and function of the human body. Topics include: an overview of each body system, how systems coordinate activities to maintain a balanced state, recognizing deviations from the normal, and medical terminology including basic word structure and terms related to body structure and function are taught as an integral part of the course.

Competency Areas

Medical Terms Describing the Human Body
Structure and Function of the Human Body

Prerequisite

Provisional admission

Credit Hours

5

Contact Hours Per Week

Class - 5

Lab - 0

FUNDAMENTAL TECHNICAL

AHS 101 - Anatomy and Physiology

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
MEDICAL TERMS DESCRIBING THE HUMAN BODY		**10**	**0**
Patient information using a knowledge of anatomical terminology	Describe anatomical position. Define and use the principle directional terms in human anatomy. Identify on diagram, sagittal, transverse, and frontal sections of the body. Define and locate the principle regions and cavities of the human body.		
Word elements and medical terminology	Give the definition of a selected group of prefixes, root combining forms, and suffixes. Write the meaning of a selected list of medical terms.		
STRUCTURE AND FUNCTION OF THE HUMAN BODY		**40**	**0**
General plan and structure of the human body	Define anatomy and physiology.		

Recommended Outline	After completing this section, the student will:	Hours Class	Lab
	Identify the structure of a cell, tissue, organ, and system, and explain the relationship among these structures as they constitute an organism.		
Chemical elements and the human body	Define the term homeostasis and metabolism.		
	Differentiate between inorganic and organic compounds and give examples of each.		
	Explain and distinguish among passive and active processes.		
	Contrast acids and use pH scale in describing acidity and alkalinity of a solution.		
	Identify the biologically significant elements from a given list by their chemical symbols and summarize the main functions of each in the body.		
Basic structure and function of systems for body integration and coordination: endocrine, nervous, and sensory systems	Locate the principle endocrine glands, and identify the principle hormone and functions.		
	Define the endocrine gland and hormone, and describe how the endocrine system works to maintain homeostasis.		
	Describe the negative feedback mechanism.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Describe the mechanism by which the hypothalamus links the nervous and endocrine systems.		
	Identify the general functions of the nervous system.		
	Explain the anatomical and functional classification of the nervous system.		
	Identify types of neurons and describe their functions.		
	Identify parts of a neuron.		
	Describe the physiology of a nerve impulse.		
	Describe structures that protect the brain and spinal cord.		
	Identify cranial nerves and give functions of each.		
	Compare and contrast the sympathetic with the parasympathetic nervous system.		
	Compare the effect of sympathetic with parasympathetic stimulation on a specific organ.		
	Identify spinal nerves and define plexus.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Name the principle areas and functions associated with the lobes of the cerebrum.		
	Identify parts of the brain.		
	Describe the structure and functions of the three major parts of the ear.		
	Describe the structure and functions of the eye.		
	Describe the physiology of vision.		
	Trace sound waves through the ear.		
	Differentiate special and general senses.		
	Describe tactile sensation and proprioception.		
Systems for maintenance of the body: cardiovascular, respiratory, gastrointestinal, and urinary systems	Describe the functions of the cardiovascular system.		
	Describe the major components of the cardiovascular system.		
	Describe the location of the heart in relation to other organs of the thoracic cavity and the associated serous membranes.		
	Label a heart identifying chambers, valves, and associated vessels of the heart.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Trace flow of blood through the heart, and distinguish between the pulmonary and systemic circulation.		
	Describe location of the parts of the conduction system of the heart, and trace the pathway of impulses initiation and conduction.		
	Describe the components of blood in reference to two main parts and the functions of each.		
	Explain the function of lymphatic systems as a subsystem to the circulatory system.		
	Describe parts of the upper and lower respiratory tract.		
	Trace the pathway of air into and out of the respiratory tract.		
	Explain the physiology of breathing.		
	Differentiate external and internal respirations.		
	Differentiate chemical and mechanical digestion.		
	Identify on diagram parts of the digestive system.		
	List primary and accessory digestive organs.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Briefly discuss physiology of all digestive organs.		
	Relate the role of the autonomic nervous system to functioning of the digestive system.		
	Associate location of the digestive organs with the front abdominal quadrants.		
	Differentiate visceral and parietal peritoneum.		
	Locate the parts of the urinary system on a diagram.		
	Explain general functions of the urinary system.		
	Explain the relationships of the urinary system to the endocrine and circulatory system.		
	Describe the structure and function of the nephron.		
	Compare the urinary system of the female with that of the male.		
	Identify the constituents of urine.		
	Differentiate among secretion, filtration, and reabsorption.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
Body support and movement: musculoskeletal and integumentary systems	Identify functions of the integumentary system.		
	Describe parts of the integumentary system.		
	Explain two divisions of the skeletal system.		
	Identify bones of the two divisions.		
	Describe functions of the skeletal system.		
	Explain relationships of the endocrine system to the skeletal system.		
	Describe development of the skeletal system.		
	List functions of the skeletal muscles.		
	Identify three types of muscles.		
	Describe criteria used for naming muscles.		
	Name the muscles used for intramuscular injection sites.		
	Differentiate tenuous ligaments, fascia.		
	Explain functions of skeletal muscular system.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Explain physiology of a muscle contraction.		
	Describe kinds of movements possible as a result of skeletal muscle contraction and joint functioning.		
Systems for continuance of the species	Describe the anatomy and physiology of the female duct system.		
	Describe physiology of the ovary.		
	Identify three parts of the uterus.		
	Label diagram of the female reproductive system.		
	Explain the hormonal control of the menstrual cycle.		
	Describe the anatomy and physiology of the male duct system.		
	Describe physiology of the testes.		
	Relate the urinary system to the reproductive system of the males.		
	Explain the relationship of endocrine functioning to the male reproductive system.		

FUNDAMENTAL TECHNICAL

AHS 101 - Anatomy and Physiology

Resources

Anthony, C. P., & Thibodeau, G. A. (1987). *Textbook of anatomy and physiology* (12th ed.). St. Louis: Mosby.

Marieb, E. (1988). *Essentials of human anatomy and physiology* (2nd ed.). Menlo Park, CA: Benjamin-Cummings.

Marieb, E. (1988). *Essentials of human anatomy and physiology workbook*. Menlo Park, CA: Benjamin-Cummings.

Memmler, R. L., & Wood, D. L. (1987). *Structure and function of the human body* (4th ed.). Philadelphia: Lippincott.

Rice, J. (1986). *Medical terminology with human anatomy*. East Norwalk, CT: Appleton & Lange.

Solomon, E. P., & Phillips, G. A. (1987). *Understanding human anatomy and physiology*. Philadelphia: Saunders.

Thibodeau, G. A., & Anthony, C. P. (1983). *Structure and function of the body*. St. Louis: Mosby.

Thomas, C. L. (1985). *Taber's cyclopedic medical dictionary* (15th ed). Philadelphia: F. A. Davis.

FUNDAMENTAL TECHNICAL

SUR 101 - Introduction to Surgical Technology

Course Overview

Course Description

Provides an overview of the surgical field and develops the fundamental concepts and principles necessary to successful participation on a surgical team. Topics include: orientation to surgical technology, cardiopulmonary resuscitation (CPR), introduction to microbiology, and asepsis and the surgical environment.

Competency Areas

Orientation to Surgical Technology
Cardiopulmonary Resuscitation (CPR)
Introduction to Microbiology
Asepsis and the Surgical Environment

Prerequisite

Provisional admission

Credit Hours

8

Contact Hours Per Week

Class - 6

D.Lab - 4

FUNDAMENTAL TECHNICAL

SUR 101 - Introduction to Surgical Technology

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
ORIENTATION TO SURGICAL TECHNOLOGY		**26**	**4**
Professional responsibilities and relations	Discuss the roles of hospitals in delivering patient care.		
	Describe roles and responsibilities of surgical team members.		
	Describe chain of command in a hospital setting.		
Operating room environment	Describe the physical aspects of the operating room environment.		
	Distinguish between restricted and unrestricted areas of the operating room suite.		
	Select equipment needed in each operating room.		
	List furniture needed in each operating room.		
	State two purposes of operating room attire.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Discuss environmental hazards of the O.R. environment including radiation, fire, electrical, body mechanics, communicable diseases, penetrating injuries, anesthetic gases, and burns.		
Legal, ethical, and historical aspects of surgery	List factors used to establish negligence.		
	Identify resources that may help a surgical technologist interpret and follow professional standards of conduct.		
	Define terms related to voluntary and statutory credentialing.		
	Define surgical conscience.		
	Discuss specific O.R. incidents that could potentially result in litigation.		
	Discuss situations that may result in ethical conflicts.		
Medical terminology	Define terms related to medical terminology.		
	Write medical abbreviations for medical/surgical terms.		
	Recognize symbols used as terminology.		
	Define root words and forms of medical specialties.		

Recommended Outline	After completing this section, the student will:	Hours Class	Lab
	Construct compound words.		
	Identify medical abbreviations.		
	Interpret medical terminology.		
CARDIOPULMONARY RESUSCITATION (CPR)		6	4
Introduction to heart and lung structure and function	Describe anatomy and physiology of the heart and lungs.		
	Identify risk factors of a stroke.		
	Discuss prudent habits of living to protect the heart.		
	Recognize signs of a heart attack.		
	Define cardiac arrest.		
Cardiopulmonary resuscitation procedures	Perform CPR on an adult mannequin.		
	Recognize foreign body airway obstruction.		
	Define respiratory arrest.		
	Simulate Heimlich maneuver in a conscious adult.		
	Simulate relief of airway obstruction in an unconscious adult.		

Recommended Outline	After completing this section, the student will:	Hours Class	Lab
INTRODUCTION TO MICROBIOLOGY		**26**	**4**
Introduction to microbiology	Discuss the historical development of the field of microbiology.		
	Define the fields of study in microbiology.		
	Explain the various theories of microbiology that have developed over the years.		
	Define terms pertinent to this area.		
	Describe the relationship among microorganisms, plants, and animals through the nitrogen cycle.		
	Identify normal flora of the body.		
	List functions of each.		
	Describe the relationship between organisms of different species.		
Cell theory	State the cell theory.		
	List the functions of the various cell structures.		
	Define the functions of the various cell structures.		
	Identify the classifications of organisms.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Define the classifications of organisms.		
	Describe the structure and function of the specific classes of microorganisms.		
	List characteristics of algae.		
	List characteristics of protozoa.		
	List characteristics of fungi (yeasts and molds).		
	List characteristics of bacteria.		
	List characteristics of rickettsiae.		
	List characteristics of viruses.		
Cell functions	Describe nutritional requirements.		
	Compare nutritional requirements.		
	Describe the growth phases and the factors that influence them.		
	Describe the microbial chromosome.		
	List the ways in which the genetic makeup can be changed.		
	Define terms relevant to this content area.		
The infectious process	List the factors that determine if a pathogen will cause disease.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Describe how the body responds to invasion by a pathogen.		
	Define various types of diseases.		
	Give an example of various types of diseases.		
	Describe the three phases in the course of a disease.		
	Discuss the factors that influence the virulence of pathogens.		
	List the sources of microorganisms that cause infectious diseases.		
	List modes of transmission of infection.		
	Give examples of modes of transmission of infection.		
	List factors that contribute to nosocomial infections.		
	List common microorganisms that cause nosocomial infections.		
	Describe methods of patient isolation.		
	Demonstrate an understanding of the Centers for Disease Control (CDC) Universal Precautions Guidelines and Recommendations as applied to the surgical suite.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
The immune response	Describe the way the skin and mucous membranes function as the first line of defense for the body.		
	List the various ways the body is protected against infectious diseases in the following systems: respiratory, digestive, reproductive, and urinary.		
	Explain how the body attempts to destroy pathogens that have penetrated the first line of defense.		
	Define immunology.		
	Describe the antibody production following exposure to an antigen.		
	Compare active and passive acquired immunity.		
	Compare natural and artificial active acquired immunity.		
	Compare natural and artificial passive acquired immunity.		
	List the various sources of vaccines.		
	Describe ways in which hypersensitivity develops.		
	Define terms relevant to this content area.		
Wound healing	List types of injury that cause damage to tissues.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Define types of traumatic wounds.		
	Give examples of types of traumatic wounds.		
	Describe the characteristics of inflammation.		
	Describe the healing process.		
	List the characteristics of the types of healing.		
	Describe the stages/phases of wound healing.		
	List factors that influence healing.		
	Describe the manner in which factors that influence healing affect the healing process.		
	List possible complications of wound healing.		
	Explain the classifications of surgical wounds.		
	Define terms relevant to this content area.		
Sterilization and disinfection	List reasons for controlling the growth of microorganisms.		
	List the necessary factors for infection.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Discuss environmental factors that influence the growth of microorganisms.		
	List factors that determine the effectiveness of antimicrobial procedures.		
	Describe the physical methods of antimicrobial control and an application of each.		
	Describe chemical methods of antimicrobial control and an application of each.		
	Describe ways in which chemicals kill or inhibit bacterial growth.		
	Define terms relevant to this content area.		
	List methods of sterilization.		
	Discuss the advantages and disadvantages of each method of sterilization.		
	Describe the types of steam sterilizers and their utilization.		
	Discuss the principles of sterilization.		
	Identify monitoring methods.		
	Discuss monitoring methods.		

Recommended Outline	After completing this section, the student will:	Hours Class	Lab
	Prepare items for sterilization.		
	Interpret sterilization record documentation.		
	Demonstrate procedures for soaking instruments or scopes.		
ASEPSIS AND THE SURGICAL ENVIRONMENT		**2**	**28**
Principles and concepts of aseptic technique	Define terms related to asepsis.		
	Discuss sources of contamination.		
	Discuss the principles of asepsis and their applications.		
	Describe methods for disinfecting a surgical suite.		
	Describe methods of chemical and physical disinfection.		
	List the actions of various chemical disinfectants and antiseptics.		
	Describe the actions of various chemical disinfectants and antiseptics.		
	Discuss factors affecting selection of an antimicrobial agent.		
Scrubbing, gowning, and gloving	Explain the basic techniques of scrubbing.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Demonstrate the basic techniques of scrubbing.		
	Demonstrate gowning and gloving of self and other team members.		

FUNDAMENTAL TECHNICAL

SUR 101 - Introduction to Surgical Technology

Resources

Books

Allen, N. C., & Gulczynski, D. (1984). *Surgical technology examination review* (3rd ed.). New York: Medical Examination.

Allmers, N., & Verderame, A. (1987). *Appleton & Lange's review for the surgical technology examination, ARCO* (2nd ed.). East Norwalk, CT: Appleton & Lange.

American Heart Association. (1986). *Cardiopulmonary resuscitation.* Author.

Association of Operating Room Nurses. (1990). *AORN standards and recommended practices for perioperative nursing* (rev. ed.). Denver: Author.

Association of Surgical Technologists. (1990). *Core curriculum for surgical technology* (3rd ed.). Littleton, CO: Association of Surgical Technologists.

Atkinson, L. J., & Kohn, M. J. (1986). *Berry & Kohn's introduction to operating room technique* (6th ed.). New York: McGraw-Hill.

Bellanti, J. (1985). *Basic immunology* (2nd ed.). Philadelphia: Saunders.

Brooks, S. M. (1978). *Fundamentals of operating room nursing* (2nd ed.). St. Louis: Mosby.

Burton, G. R. (1988). *Microbiology for the health sciences* (3rd ed.). Philadelphia: Lippincott.

Crooks, L. (1979). *Operating room techniques for the surgical team*. Boston: Little, Brown.

Davis, D., Kneedler, J., & Manuel, B. (1978). *The surgical experience: A model for professional nursing practice in the operating room.* Denver: Association of Operating Room Nurses.

Dixon, J. A. (1983). *Surgical application of lasers.* Chicago: Year Book Medical Publishers.

Fiesta, J. (1988). *The law and liability: A guide for nurses* (2nd ed.). New York: John Wiley & Sons.

Fong, E. (1987). *Microbiology for health careers* (4th ed.). Albany, NY: Delmar.

Fuerst, R. (1983). *Frobisher and Fuerst's microbiology in health and disease* (15th ed.). Philadelphia: Saunders.

Fuerst, R. (1983). *Microbiology in health and disease: Laboratory manual and workbook* (7th ed.). Philadelphia: Saunders.

Fuller, J. (1986). *Surgical technology: Principles and practice* (2nd ed.). Philadelphia: Saunders.

Grubb, R. D., Ondov, G., & Bagley, L. (1979). *Operating room guidelines*. St. Louis: Mosby.

Gruendemann, B. J., & Rothrock, J. (1991). *Alexander's care of the patient in surgery* (9th ed.). St. Louis: Mosby.

Hole, J. W., Jr. (1987). *Human anatomy and physiology* (4th ed.). Dubuque, IA: Wm. C. Brown.

James, E., Corry, R., & Perry, J. (Eds.). (1987). *Basic surgical practice.* St. Louis: Mosby.

Jensen, E. (1989). *Student success secrets* (3rd ed.). Hauppauge, NY: Barron's Educational Series.

Joint Commission on Accreditation of Hospitals. (1988). *Accreditation manual for hospitals: 1989 Edition.* Chicago: Author.

Kalman, N., & Waughfield, C. (1987). *Mental health concepts* (2nd ed.). Albany, NY: Delmar.

Kneedler, J. A., & Dodge, G. H. (1987). *Perioperative patient care: The nursing perspective* (2nd ed.). Boston: Blackwell Scientific.

Lach, J. (1974). *O.R. nursing: Preoperative care and draping technique*. Chicago: Kendall.

LeMaitre, G., & Finnegan, J. A. (1980). *The patient in surgery: A guide for nurses* (4th ed.). Philadelphia: Saunders.

Marieb, E. (1988). *Essentials of human anatomy and physiology* (2nd ed.). Menlo Park, CA: Benjamin-Cummings.

Potter, P. (1987). *Basic nursing.* St. Louis: Mosby.

Smith, A. L. (1980). *Microbiology and pathology* (12th ed.). St. Louis: Mosby.

Stillman, R. (Ed.). (1989). *Surgery, diagnosis, and therapy, 89/90.* East Norwalk, CT: Appleton & Lange.

Sundberg, M. C. (1986). *Fundamentals of nursing.* Boston: Jones & Bartlett.

Teaching the operating room technician. (1972). Denver: Association of Operating Room Nurses.

Thomas, C. L. (Ed.). (1989). *Taber's cyclopedic medical dictionary* (16th ed.). Philadelphia: F. A. Davis.

Van Way, C. W., III, & Buerk, C. (1986). *Pocket manual of basic surgical skills.* St. Louis: Mosby.

Van Way, C. W., III, & Buerk, C. (1989). *Surgical skills in patient care* (2nd ed.). St. Louis: Mosby.

Audiovisuals

Asepsis [Filmstrip]. Philadelphia: Lippincott Learning System.

Basic microbiology [Film]. Garden Grove, CA: Trainex.

Basic nursing care: Medical aspects, #936 [Filmstrip]. Garden Grove, CA: Trainex.

Beyond the knife [Videocassette]. (1988). Nova.

Coping with stress [Videocassette]. Morris Video.

Dealing with difficult people [Film]. Phoenix: BFKA.

Dr. Katner speaks on aids, #6684 [Videocassette]. (1989). Atlanta: Georgia Department of Education.

Dr. Katner teaches about aids, #6605 [Videocassette]. (1989). Atlanta: Department of Education.

For the patient's sake [Film]. Somerville, NJ: Ethicon Educational Films.

Fundamentals of aseptic technique, DG-1223 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Infection control [Film]. Somerville, NJ: Ethicon Educational Film.

Infection control [Filmstrip]. Irvine, CA: Concept Media.

Infection control: Disinfection, sterilization, and asepsis, #915 [Film]. Garden Grove, CA: Trainex.

Inhospital sterilization, DG-1368 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Into the heart [Videocassette]. (1988). Nova.

Introduction to electrosurgery [Filmstrip]. Deseret-Operating Room Products Division.

Is this case dirty? -- O.R. sanitation, DG-1313 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

New organs for old [Videocassette]. (1988). Nova.

Operating room scrubbing, gowning, and gloving, program #184 [Film]. Garden Grove, CA: Trainex.

Pioneers of surgery [Videocassette]. (1988). Nova.

Principles of infection control in wound care, #760 [Filmstrip]. Garden Grove, CA: Trainex.

Proper operating room attire, DG-1209 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Scrubbing, gowning, and gloving: Update, DG-1488 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Surgery the brutal craft [Videocassette]. (1988). Nova.

Surgical scrub procedure, #1213 [Film]. Paramus, NJ: Karol Media.

Surgical technology: A professional opportunity. (1989). Littleton, CO: Association of Surgical Technologists.

Journals

AORN recommended practices for inhospital sterilization. (1980). *AORN Journal, 33(2).*

A review of disinfectants, part II. (1980). *Infection Control Rounds, 4(1).*

FUNDAMENTAL TECHNICAL

SUR 102 - Principles of Surgical Technology

Course Overview

Course Description

Introduces student to patient care concepts and practices and provides continued study of surgical team participation. Topics include: patient care concepts such as preoperative routine, positioning, preparation, draping, and related nursing procedures; introduction to pharmacology; and supplies and equipment.

Competency Areas

Patient Care Concepts
Introduction to Pharmacology
Supplies and Equipment

Prerequisites

AHS 101, MAT 101, SUR 101

Credit Hours

8

Contact Hours Per Week

Class - 6

D.Lab - 4

FUNDAMENTAL TECHNICAL

SUR 102 - Principles of Surgical Technology

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
PATIENT CARE CONCEPTS		**22**	**18**
Preoperative routine	Review the surgical patient's chart for required preoperative information.		
	Discuss the legal importance of the records of the surgical patient.		
	Discuss the care that the surgical patient may receive prior to the scheduled procedure.		
	Discuss the physician's responsibility to obtain an informed consent.		
	Describe the role of the anesthesiologist in the consent process.		
	List the purposes of a consent.		
	List the different types of consents for surgery.		
	List the contents of a consent document.		
	Discuss the legal guidelines of signing a surgical consent.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Describe circumstances that may occur that require a person other than the patient to sign a consent.		
	List persons authorized to witness a consent.		
	Discuss the process of obtaining a consent in a life threatening situation.		
	Identify the methods of patient transportation.		
	Give examples of the use of each method of patient transportation.		
	Demonstrate the principles of safe transportation of a patient for each of the aforementioned methods.		
Positioning	Discuss the factors that determine the surgical position, including safety considerations.		
	Demonstrate the use of the surgical table and its accessories.		
	Assemble additional supplies that may be required for patient positions.		
	Demonstrate the basic surgical positions and use of equipment required for each position.		
	Cite safety factors for each surgical position.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Cite the appropriate surgical position for selected procedures.		
Skin preparation	State the purpose of skin preparation.		
	Recognize the time when an operative skin prep is to be done.		
	List basic equipment needed for an operative skin prep.		
	List types of antiseptic solutions used.		
	Describe a basic prep and a one step prep for a clean area.		
	Demonstrate a basic prep and a one step prep for a clean area.		
	Compare the prep for a clean area and a dirty area.		
	Describe preps for specific areas of the body.		
	Identify methods of marking skin.		
Draping	List the materials of which surgical drapes are made.		
	Describe the materials of which surgical drapes are made.		
	List the various types of surgical drapes.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Discuss the basic techniques of draping.		
	Describe the various types of surgical drapes.		
	Demonstrate the basic techniques of draping.		
	Discuss methods of draping various surgical regions of the body.		
	Demonstrate methods of draping various surgical regions of the body.		
	Demonstrate the draping of various O.R. furniture.		
Related nursing procedures	Define terms related to vital signs.		
	Discuss principles of measuring and evaluating vital signs.		
	Assemble equipment for the measuring of vital signs.		
	Demonstrate methods of measuring vital signs.		
	Record vital signs.		
Care of specimens	Define the word "specimen."		
	Describe handling of tissue specimens.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Identify types of containers.		
	Describe the handling of specific types of specimens.		
	Identify methods used to preserve specimens.		
	Give an example for each method used to preserve specimens.		
	Describe the procedure for specimen labeling for transfer to appropriate department.		
	Discuss areas for specimen storage.		
	Give an indication of each area for specimen storage.		
Pediatric/geriatric care	Define terms related to pediatric/geriatric care.		
	State the correct ages for the stages of pediatric development.		
	List major reasons for pediatric surgery.		
	Identify special considerations in caring for the pediatric patient.		
	Describe common operative procedures on the pediatric patient.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Describe changes in body systems that commonly occur in the older adult and their related problems.		
	Identify special considerations in caring for the geriatric patient.		
Death and dying	Define terms related to death and dying.		
	State physical and emotional impacts on quality of life following various surgical interventions for chronic disease.		
	List three major body systems that fail and result in death.		
	Distinguish between clinical and biological death.		
	Match different perceptions of death with the correct characteristics.		
	State the two types of death.		
	Match the stages of terminal illness with the correct patient experiences.		
	Distinguish between grieving and mourning.		
	Discuss feelings the surgical team may have after the death of a patient.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
INTRODUCTION TO PHARMACOLOGY		**16**	**4**
Weights and measures	Convert equivalent units of one system to another.		
	Pour solutions accurately.		
	Measure solutions accurately.		
	Complete basic math problems.		
	Accurately calculate dosages of liquids and solids.		
	Accurately mix drugs.		
Pharmacologic agents	Discuss care and precautions in identifying drugs and solutions.		
	Demonstrate safe practice in transferring drugs and solutions from the nonsterile to sterile field.		
	Demonstrate the procedure for identifying a drug or solution on the sterile field.		
	Explain legal ramifications of improper drug/solution handling.		
	Describe the surgical technologist's legal responsibility in the handling of drugs and solutions.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Describe the action, uses, and modes of administration of drugs used in the care of the surgical patient.		
	Describe drug side effects and contraindications for use.		
Anesthesia	Describe factors that influence anesthesia selection for individual patients.		
	List commonly prescribed preoperative medications.		
	Explain the reasons a preoperative medication is given.		
	List various types of anesthesia.		
	Describe various types of anesthesia.		
	Explain different methods by which an anesthetic may be administered.		
	List commonly used anesthetic drugs.		
	Describe commonly used anesthetic drugs.		
	Explain the roles of the scrub person and circulator in the administration of anesthesia.		
	Describe the phases of general anesthesia and possible complications of each phase.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	List the agents used in local, regional, and spinal anesthesia.		
	Describe the action, administration, and possible complications of each anesthesia agent.		
	Discuss equipment used as adjuncts to anesthesia.		
	Explain means of monitoring the condition of the patient during anesthesia.		
	List complications of anesthesia.		
	Describe complications of anesthesia.		
	Describe the etiology, clinical manifestations, and management of malignant hyperthermia.		
SUPPLIES AND EQUIPMENT		**22**	**18**
Operating room furniture and accessory equipment	Name the functions of common types of accessory surgical equipment, including suction systems, electrosurgical units, lights, and tourniquets.		
	Explain the functions of common types of accessory surgical equipment.		
	Demonstrate placement of the necessary appliances and preparation of each device for use.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
Specialty equipment	Describe common types and uses of special equipment.		
	Discuss the types, care, and handling of endoscopes.		
	Discuss the types, care, and handling of power tools.		
	Discuss the types, care, and handling of lasers.		
	Discuss the types, care, and handling of microscopes.		
	Identify the types of thermoregulatory devices.		
	List indications for their use.		
	Describe the setup of each type of unit.		
	Discuss the required safety precautions.		
Supplies	Identify basic sterile packs.		
	Arrange basic sterile packs.		
	Identify common sponges and dressings as to type, use, and preparation.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Describe the major types of catheters, drains, tubes, and collecting mechanisms and the uses and preparation of each.		
	List various usages of accessory supplies.		
	Define various usages of accessory supplies.		
Instrumentation	List the classifications of surgical instruments by function.		
	Define the classifications of surgical instruments by function.		
	Describe methods of care and handling of surgical instruments.		
	Locate basic instruments.		
	Assemble specified instrument sets.		
Sterile field	Demonstrate the preparation of the operating room prior to setting up a sterile field.		
	Demonstrate the opening of sterile supplies.		
	Explain what the scrub person must do immediately prior to the surgical scrub.		
	Demonstrate the steps of the surgical hand scrub.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Demonstrate preparation of supplies and instruments on the sterile field.		
	Explain in detail the procedure for counting instruments, sponges, needles, and other items in the field.		
	Explain in detail the procedure required for an incorrect count.		
	Complete a count sheet.		
	Perform a sponge, needle, and instrument count.		
	Demonstrate the initial steps for starting a procedure.		
	Demonstrate intraoperative handling of sterile equipment and supplies.		
	Explain postoperative routines.		
Sutures and stapling devices	Define "suture."		
	List common suture terms.		
	Define common suture terms.		
	Describe suture packaging.		
	Describe suture sizing (gauge).		
	Describe the types, characteristics, and uses of natural absorbable suture materials.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Describe the types, characteristics, and uses of synthetic absorbable suture materials.		
	Differentiate between the body's suture absorption processes.		
	List the common natural nonabsorbable sutures, stating their sources and uses.		
	Describe the common natural nonabsorbable sutures.		
	State the sources and uses of common natural nonabsorbable sutures.		
	Describe the synthetic nonabsorbable sutures (polymers), including common trade names and uses.		
	Describe the various coatings that sutures may have and their significance.		
	Discuss suture preparation and handling techniques in the sterile field.		
	List common ligating methods.		
	List the factors relating to the choice of suture.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Discuss factors influencing the closure of each wound layer and the types of suture materials that may be used.		
	List common suture techniques.		
	Define common suture techniques.		
	Discuss suture accessory devices.		
	Discuss the advantages and disadvantages of surgical stapling.		
	Discuss the basic uses of stapling instruments.		
	List the basic types of stapling devices.		
	Describe the basic types of stapling devices.		
	Explain how to load, handle, and clean stapling devices.		
	Demonstrate how to load, handle, and clean stapling devices.		
	Discuss types of mesh or fabric used in reinforcement or closure of wounds.		
Needles	Describe the shape of various needle bodies.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	List the basic types of needle points.		
	Describe the basic types of needle points.		
	Explain common terms associated with eyeless needle attachment.		
	State the names of common eyeless needles used for basic surgical techniques.		
	Describe the common types of eyed needles.		
	Describe the factors regarding selection of proper needle holders and loading of needles.		
	Explain methods of accounting for needles.		
	List other surgical needles.		
	Describe other surgical needles.		
Hemostasis and blood replacement	Discuss the methods of achieving hemostasis.		
	Demonstrate handling of hemostatic agents/devices.		
	Describe ways that blood loss is monitored.		
	Discuss handling of blood replacement components.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Discuss autotransfusion and related terminology.		
Urinary catheterization	List indications for urinary catheterization.		
	Discuss the basic considerations for catheterization.		
	List supplies required to perform a catheterization.		
	Discuss a catheterization.		
	Demonstrate a catheterization (simulation may be used).		
	Discuss the principles of monitoring urine output.		

FUNDAMENTAL TECHNICAL

SUR 102 - Principles of Surgical Technology

Resources

Books

Anderson, R. M., & Romfh, R. F. (1980). *Technique in the use of surgical tools*. East Norwalk, CT: Appleton & Lange.

Asperheim, M. K. (1987). *Pharmacology: An introductory text* (6th ed.). Philadelphia: Saunders.

Association of Operating Room Nurses. (1990). *AORN standards and recommended practices for perioperative nursing* (rev. ed.). Denver: Author.

Association of Surgical Technologists. (1990). *Core curriculum for surgical technology.* Littleton, CO: Author.

Atkinson, L. J., & Kohn, M. J. (1986). *Berry & Kohn's introduction to operating room technique* (6th ed.). New York: McGraw-Hill.

Ball, K. (1990). *Lasers: The perioperative challenge.* St. Louis: Mosby.

Bender, D., & Hagen, R. (1988). *Death and dying annual, 1988.* St. Paul: Greenhaven.

Blume, D. M., & Cornett, E. F. (1983). *Dosages and solutions* (4th ed.). Philadelphia: F. A. Davis.

Brooks, S. M. (1978). *Fundamentals of operating room nursing* (2nd ed.). St. Louis: Mosby.

Brooks, S. M. (1982). *Instrumentation for the operating room: A photographic manual* (2nd ed.). St. Louis: Mosby.

Care and handling of surgical instruments (Latest ed.). Randolph, MA: Codman & Shartlett.

Clayton, B. D., & Stock. (1988). *Basic pharmacology for nurses* (9th ed.). St. Louis: Mosby.

Crooks, L. (1979). *Operating room techniques for the surgical team.* Boston: Little, Brown.

Davis, D., Kneedler, J., & Manuel, B. (1978). *The surgical experience: A model for professional nursing practice in the operating room*. Denver: Association of Operating Room Nurses.

Dixon, J. A. (1983). *Surgical application of lasers.* Chicago: Year Book Medical Publishers.

Fuller, J. (1986). *Surgical technology: Principles and practice* (2nd ed.). Philadelphia: Saunders.

Grubb, R. D., Ondov, G., & Bagley, L. (1979). *Operating room guidelines*. St. Louis: Mosby.

Gruendmann, B. J., & Rothrock, J. (1990). *Alexander's care of the patient in surgery* (9th ed.). St. Louis: Mosby.

Hitner, H., & Nagle, B. T. (1980). *Basic pharmacology for health occupations*. Indianapolis: Bobb-Merrill Educational Publishing.

Hoeller, M. (1974). *Surgical technology: Basis for clinical practice* (3rd ed.). St. Louis: Mosby.

Jackson, E. W. (Ed.). (1978). *Dealing with death and dying: A nursing skillbook.* Horsham, PA: Intermed Communication.

Kalman, N., & Waughfield, C. (1987). *Mental health concepts* (2nd ed.). Albany, NY: Delmar.

Kneedler, J. A., & Dodge, G. H. (1987). *Perioperative patient care: The nursing perspective* (2nd ed.). Boston: Blackwell Scientific.

Kubler-Ross, E. (Ed.). (1975). *Death: The final stage of growth*. Englewood Cliffs, NJ: Prentice Hall.

Kubler-Ross, E. (1970). *On death and dying*. New York: Macmillan.

Lach, J. (1974). *O.R. nursing: Preoperative care and draping technique.* Chicago: Kendall.

LeMaitre, G., & Finnegan, J. A. (1980). *The patient in surgery: A guide for nurses* (4th ed.). Philadelphia: Saunders.

Loebl, S., & Spratto, G. R. (1986). *The nurse's drug handbook* (4th ed.). New York: John Wiley & Sons.

Morel, A., & Wise, G. (1979). *Urologic endoscopic procedures* (2nd ed.). St. Louis: Mosby.

Nursing care of the patient in the O.R. (1975). Somerville, NJ: Ethicon.

Nursing 90 drug handbook. (1990). Springhouse, PA: Intermed Communications.

Reid-Sloan, J. (1983). *Practical nursing, Vol. II*. Stillwater, OK: Curriculum and Instructional Materials Center/Oklahoma State Department of Vocational and Technical Education.

Schniedman, R. S., Lambert, & Worder, B. (1981). *Being a nursing assistant* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Sheridan, E., Patterson, H. R., & Gustafson, E. (1982). *Falconer's the drug, the nurse, the patient* (7th ed.). Philadelphia: Saunders.

Sloan, J. R. (1982). *Practical nursing, I*. Stillwater, OK: Curriculum and Instructional Materials Center/Oklahoma State Department of Vocational and Technical Education.

Teaching the operating room technician. (1972). Denver: Association of Operating Room Nurses.

Thomas, C. L. (Ed.). (1989). *Taber's cyclopedic medical dictionary* (16th ed.). Philadelphia: F. A. Davis.

Van Way, C. W., III, & Buerk, C. (1989). *Surgical skills in patient care* (2nd ed.). St. Louis: Mosby.

Williams, S., & McVan, B. (Eds.). (1979). *Monitoring fluid and electrolytes precisely* (2nd ed.). Springhouse, PA: Springhouse.

Wolff, L., & Weitzel, M. H. (1983). *Fundamentals of nursing* (7th ed.). Philadelphia: Lippincott.

Refer to policy and procedural manual at affiliate sites for practicum specific resources.

Audiovisuals

A gift from Mrs. Timm [Film]. Dartnell.

A laser safe environment, DG 1558 [Film]. Danbury, CT: Davis & Geck.

A therapeutic environment: The perioperative challenge, DG 1557 [Film]. Danbury, CT: Davis & Geck.

Admitting the patient for surgery, PC 194 [Filmstrip]. Garden Grove, CA: Trainex.

Apothecary measure [Film]. Garden Grove, CA: Trainex.

Appendectomy model [Videocassette]. Austin, TX: Delletec.

Aseptic technique: Stressing the fundamentals [Video]. Danbury, CT: Davis & Geck.

Bacteria: Invisible friends and foes [Film]. Human Relations Media.

Basic clinical skills: Blood pressure [Film]. Medcon.

Basic clinical skills: Lifting and moving [Film]. Medcon.

Basic clinical skills: Preoperative and postoperative care [Film]. Medcon.

Basic clinical skills: Surgical wound care [Film]. Medcon.

Basic clinical skills: Temperature, pulse, and respiration [Film]. Medcon.

Basic positions, DG-1406 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Blanketal hyper-hypothermia system [Filmstrip]. Cincinnati: Sub-Zero Products, Inc.

Care and handling of surgical instruments, DG-766 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Care of the patient with terminal cancer, #249 [Film]. Garden Grove, CA: Trainex.

Caring for the elderly [Film]. Films for the Humanities.

Closed suction wound drainage, #763 [Film]. Garden Grove, CA: Trainex.

Coping with stress [Videocassette]. Morris Video.

Dealing with difficult people [Film]. Phoenix: BFKA.

Death and dying, #3501 [Film]. Garden Grove, CA: Trainex.

Death and dying: A professional approach, #975 [Film]. Garden Grove, CA: Trainex.

Elderly surgical patient, DG 1515 [Film]. Danbury, CT: Davis & Geck.

For the patient's sake [Film]. Somerville, NJ: Ethicon Educational Films.

I'm not a small adult--Nursing care of the pediatric patient in surgery, DG-1066 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Introduction to electrosurgery [Filmstrip]. Deseret--Operating Room Products Division.

Local anesthesia: Implications for the perioperative nurse, DG 1604 [Film]. Danbury, CT: Davis & Geck.

Loss and grief [Film]. Irvine, CA: Concept Media.

Medicating the elderly [Film]. AJN.

Metric system [Film]. Garden Grove, CA: Trainex.

Neonate, perioperative considerations, DG 1649 [Film]. Danbury, CT: Davis & Geck.

Not too hot to handle: Malignant hyperthermia, DG 1648 [Film]. Danbury, CT: Davis & Geck.

Operating room draping No. 1: Mastectomy and lithotomy, #PC 205 [Film]. Garden Grove, CA: Trainex.

Operating room draping No. 2: Thoracotomy, laparotomy, and extremity, #PC 206 [Film].

Operating room positioning No. 1: Supine and lithotomy, #PC 195 [Film]. Garden Grove, CA: Trainex.

Operating room positioning No. 2: Lateral, prone, and jackknife [Film]. Garden Grove, CA: Trainex.

Operating room skin preparation, #PC 198 [Film]. Garden Grove, CA: Trainex.

Pain and healing [Film]. New York: WNET.

Pediatric abdominal surgery, #1024 [Film]. Garden Grove, CA: Trainex.

Pediatric surgery for congenital defects, #1023 [Film]. Garden Grove, CA: Trainex.

Pediatric thoracic surgery, #1025 [Film]. Garden Grove, CA: Trainex.

Perspectives on dying [Film]. Irvine, CA: Concept Media.

Positioning the surgical patient, DG-1406 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Powered surgical instruments, DG 1641 [Film]. Danbury, CT: Davis & Geck.

Preoperative skin preparation of the patient, DG-1302 [Film]. American College of Surgeons, Surgical Film Library.

Preventing intraoperative skin injuries, DG 1605 [Film]. Danbury, CT: Davis & Geck.

Prevention of medication errors [Film]. Lippincott.

Sponge, needle, and instrument counts, DG-1268 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Surgical dressing, #759 [Film]. Garden Grove, CA: Trainex.

Surgical instruments: Care and handling, DG 1487 [Film]. Danbury, CT: Davis & Geck.

Sutures, needles, and skin closure material, #1215 [Film]. Paramus, NJ: Karol Media.

This patient is awake, DG 1314 [Film]. Danbury, CT: Davis & Geck.

Three techniques in the art of communication, DG 1642 [Film]. Danbury, CT: Davis & Geck.

Transportation of the patient to the operating room, DG-1179 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Understanding the operating room microscope [Video]. Danbury, CT: Davis & Geck.

Urethral catheterization: Technique for the female patient, #765 [Film]. Garden Grove, CA: Trainex.

Urethral catheterization: Technique for the male patient, #766 [Film]. Garden Grove, CA: Trainex.

Use of surgical instruments, DG-1000 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Water sealed drainage, #772 [Film]. Garden Grove, CA: Trainex.

Where art and science meet, #1212 [Film]. Paramus, NJ: Karol Media.

Journals

Recommended practices: Sponge, sharp, and instrument counts. (1984). *AORN Journal, 39,* 699-703.

FUNDAMENTAL TECHNICAL

SUR 112 - Introductory Surgical Practicum

Course Overview

Course Description

Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include: scrubbing, gowning, gloving, and draping; assistance with patient care; processing of instruments and supplies; creation and maintenance of a sterile field; basic instrumentation; and environmental sanitation.

Competency Areas

Scrubbing, Gowning, Gloving, and Draping
Assistance With Patient Care
Processing of Instruments and Supplies
Maintenance of a Sterile Field
Basic Instrumentation
Environmental Sanitation

Prerequisites

Program admission, AHS 101 and SUR 101 (taken no longer than 6 months prior to enrollment in SUR 112)

Prerequisite/Corequisite

SUR 102

Credit Hours

7

Contact Hours Per Week

Class - 0

O.B.I. - 21

FUNDAMENTAL TECHNICAL

SUR 112 - Introductory Surgical Practicum

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	Hours OBI
SCRUBBING, GOWNING, GLOVING, AND DRAPING		**0**	**(210)**
Surgical scrub	List the principles of aseptic technique.		
	Perform a 2-3 minute handwash.		
	Demonstrate the ability to perform a surgical scrub.		
	Dry hands after scrubbing.		
Gown application and removal	Put on a sterile gown.		
	Gown another person.		
	Tie and close another person's sterile gown.		
	Remove soiled gown.		
Glove application and removal	Put on sterile gloves using the closed and or open technique.		
	Glove another person.		
	Remove soiled gloves.		
Create a sterile field using sterile technique	Open a cloth- or paper-wrapped sterile item.		

Recommended Outline	After completing this section, the student will:	Hours Class	OBI
	Open a sterile peel-back item.		
	Open a sterile basin on a ringstand.		
	Open a sterile pack on a back table.		
Draping with application of sterile technique	Drape patient for a laparotomy.		
	Drape patient for vaginal surgery.		
	Drape patient for surgery on an extremity (leg).		
	Drape a Mayo stand.		
ASSISTANCE WITH PATIENT CARE		**0**	**(210)**
Communication	Accept professional responsibilities of a surgical technician.		
	Exhibit positive interaction with patients and staff.		
	Interpret directions effectively.		
	Follow directions effectively.		
	Communicate professionally.		
	Comply with hospital policy.		
Transfer/transport	Prepare stretcher.		
	Transport patient from room to operating room.		

Recommended Outline	After completing this section, the student will:	Hours Class OBI
	Transfer patient from stretcher to operating room table.	
	Transfer patient from operating room table to recovery room.	
Patient positioning	Observe and/or assist with positioning the patient in the supine position and its variations.	
	Observe and/or assist with positioning the patient in the prone position and its variations.	
	Observe and/or assist with positioning the patient in the lateral position and its variations.	
Surgical skin prep	Observe and/or assist with preparation of patient's skin for abdominal surgery.	
	Observe and/or assist with preparation of patient's skin for vaginal surgery.	
	Observe and/or assist with preparation of patient's skin for surgery on an extremity.	
Patient draping	Observe and/or assist with draping of patient for a laparotomy.	
	Observe and/or assist with draping of patient for vaginal surgery.	

Recommended Outline	After completing this section, the student will:	Hours Class OBI
	Observe and/or assist with draping of patient for surgery on an extremity.	
Vital signs	Take temperature.	
	Take pulse and respiration.	
	Take blood pressure.	
	Apply monitoring devices.	
Dressing, drains, and catheters	Demonstrate the ability to make a "sponge stick."	
	Demonstrate the ability to apply a routine post-operative dressing.	
	Demonstrate the ability to apply a thyroid collar dressing.	
	Demonstrate the ability to apply an ostomy bag to stoma site.	
	Assist with and/or observe an insertion of a straight catheter in a female patient.	
	Assist with and/or observe an insertion of a straight catheter in a male patient.	
	Assist with and/or observe an insertion of a Foley catheter in a female patient.	
	Assist with and/or observe a connection of a Hemovac.	

Recommended Outline	After completing this section, the student will:	Hours Class OBI
	Assist with and/or observe a connection of a Jackson-Pratt.	
	Assist with and/or observe a connection of a chest tube to a Pleur-evac.	
	Assist with and/or observe a connection of a chest tube to a 2-bottle underwater seal drainage system.	
	Assist with and/or observe a connection of a T-tube to a bile bag.	
Specimens	Demonstrate the handling of tissue specimens on the surgical field.	
	Demonstrate the handling of specific types of tissue.	
	Demonstrate surgical field specimen protocol for department policy dictates.	
	Demonstrate surgical field specimen protocol for handling.	
	Demonstrate surgical field specimen protocol for surgeon's markers.	
	Demonstrate surgical field specimen protocol for positive identification.	

Recommended Outline	After completing this section, the student will:	Hours Class	OBI
	Demonstrate handling procedures for specific types of tissue requiring specific handling such as: a) lymph nodes b) tones c) body fluids d) breast tissue e) frozen sections f) kidney-testicular biopsy g) cartilage h) amputated limbs i) foreign bodies-bullets j) others.		
PROCESSING OF INSTRUMENTS AND SUPPLIES		**0**	**(210)**
Decontamination	Hand wash instruments.		
	Operate a washer sterilizer.		
	Operate an ultrasonic cleaner.		
	Observe and/or assist with the operation of a gas sterilizer.		
Sterilization	Read an autoclave chart.		
	Operate a high speed autoclave.		
	Package an item for sterilization.		
	Observe and/or assist with sterilizer training.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours OBI
MAINTENANCE OF A STERILE FIELD		**0**	**(210)**
Organization and efficiency of setup	Check supplies and equipment needed for surgical procedures.		
	Organize back table.		
	Organize Mayo.		
	Organize equipment and supplies.		
	Exhibit economy of time, motion, and materials.		
Counts	Perform counts on instruments.		
	Perform counts on sharps.		
	Perform counts on sponges.		
Breaks and techniques	Recognize breaks in sterile technique.		
	Initiate response to breaks in sterile technique.		
Handling medications and solutions	Demonstrate correct procedure for identifying medications/solutions on the sterile field.		
	Demonstrate correct procedure for accepting medications/solutions on the sterile field.		

Recommended Outline	After completing this section, the student will:	Hours Class	OBI
BASIC INSTRUMENTATION		**0**	**(210)**
Arrangement	Set up instrumentation on back table.		
	Set up basic Mayo stand.		
Handling	Use instruments for intended purpose.		
	Pass instruments.		
	Load blade on scalpel handle.		
	Unload blade on scalpel handle.		
	Load a needleholder--right and left.		
	Assemble instrumentation.		
	Handle instruments safely.		
Maintenance	Test operation of instrumentation for function.		
	Follow procedure for nonfunction and functional instrumentation.		
ENVIRONMENTAL SANITATION		**0**	**(210)**
Surgical environment	Perform concurrent disinfection and terminal disinfection.		
	Perform cleaning prior to the first scheduled procedure.		

Recommended Outline	After completing this section, the student will:	Hours Class OBI
	Confine contamination to a designated sterile area during a surgical procedure.	
	Perform terminal disinfection at the completion of the daily schedule.	
	Perform cleaning of peripheral areas of the surgical suite which require weekly cleaning.	
	Clean up operating room after case.	
	Clean up operating room at end of day.	

FUNDAMENTAL TECHNICAL

SUR 112 - Introductory Surgical Practicum

Resources

See resource pages from SUR 102.

SPECIFIC TECHNICAL

SUR 103 - Surgical Procedures I

Course Overview

Course Description

Introduces students to surgical procedures, incisions, wound closure, operative pathology, and common complications as applied to general and specialty surgery. Topics include: introduction to surgical procedures, general surgery and special techniques, obstetrical and gynecological surgery, gastrointestinal surgery, genitourinary surgery, head and neck surgery, and plastic and reconstructive surgery.

Competency Areas

Introduction to Surgical Procedures
General Surgery and Special Techniques
Obstetrical and Gynecological Surgery
Gastrointestinal Surgery
Genitourinary Surgery
Head and Neck Surgery
Plastic and Reconstructive Surgery

Prerequisite

SUR 102

Credit Hours

9

Contact Hours Per Week

Class - 8

D.Lab - 2

SPECIFIC TECHNICAL

SUR 103 - Surgical Procedures I

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
INTRODUCTION TO SURGICAL PROCEDURES		**6**	**4**
Terminology	Use medical terminology concepts to read, interpret, and utilize the operating room posting schedule. Review anatomy of the abdominal wall. Define types of common abdominal incisions. Discuss instrumentation and suture sequence for opening and closing the abdomen. Describe special techniques in general surgery (include bowel technique, cancer technique, and x-ray procedures).		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
GENERAL SURGERY AND SPECIAL TECHNIQUES		**12**	**6**
Lessons to include but not limited to:			
Hernias Breast biopsy Mastectomy Superficial cysts, lesions, or tumors Thyroidectomy Incision and drainage Vein ligation	Discuss relevant anatomy. Describe the pathology that prompts surgical intervention and the related terminology. Discuss any special preoperative diagnostic procedures/tests. Discuss any special preoperative preparation procedures. Identify the names and uses of special equipment. Discuss the intraoperative preparation of the patient. Give an overview of the surgical procedure. Discuss the purpose and expected outcomes of the surgery. Discuss the immediate postoperative care and possible complications. Describe special techniques in general surgery (include bowel technique, cancer technique, and x-ray procedures).		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
OBSTETRICAL AND GYNECOLOGICAL SURGERY		**12**	**2**

Lessons to include but not limited to:

Laparoscopy	Discuss relevant anatomy.
Total abdominal hysterectomy	Describe the pathology that prompts surgical intervention and the related terminology.
Total vaginal hysterectomy	
Cesarean section	
Tubal ligation	
Cervical procedures	Discuss any special preoperative diagnostic procedures/tests.
	Identify the names and uses of special instruments, supplies, and drugs.
	Identify the names and uses of special equipment.
	Discuss the intraoperative preparation of the patient.
	Give an overview of the surgical procedure.
	Discuss the purpose and expected outcomes of the surgery.
	Discuss immediate postoperative care and possible complications.

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
GASTROINTESTINAL SURGERY		**18**	**2**

Lessons to include but not limited to:

Appendectomy	Discuss relevant anatomy.
Cholecystectomy with cholangiogram	Describe the pathology that prompts surgical intervention and the related terminology.
Excision of tumor and biopsies from gastrointestinal tract	
Gastrointestinal endoscopy	Discuss any special preoperative diagnostic procedures/tests.
Gastrointestinal resection	
Hemorrhoidectomy	
Anal fissure	Identify the names and uses of special instruments, supplies, and drugs.
	Identify the names and uses of special equipment.
	Discuss the intraoperative preparation of the patient.
	Give an overview of the surgical procedure.
	Discuss the purpose and expected outcomes of the surgery.
	Discuss the immediate postoperative care and possible complications.

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
GENITOURINARY SURGERY		**12**	**2**
Lessons to include but not limited to:			
Orchiectomy Hydrocelectomy Circumcision Cysto/T.U.R.P. Retrograde pyelogram	Discuss relevant anatomy. Describe the pathology that prompts surgical intervention and the related terminology. Discuss any special preoperative diagnostic procedures/tests. Discuss any special preoperative preparation procedures. Identify the names and uses of special instruments, supplies, and drugs. Identify the names and uses of special equipment. Discuss the intraoperative preparation of the patient. Give an overview of the surgical procedure. Discuss the purpose and expected outcomes of the surgery. Discuss the immediate postoperative care and possible complications.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
HEAD AND NECK SURGERY		**10**	**2**
Lessons to include but not limited to:			
Tonsillectomy Adenoidectomy Myringotomy and tubes	Discuss relevant anatomy. Describe the pathology that prompts surgical intervention and the related terminology. Discuss any special preoperative diagnostic procedures/tests. Discuss any special preoperative preparation procedures. Identify the names and uses of special instruments, supplies, and drugs. Identify the names and uses of special equipment. Discuss the intraoperative preparation of the patient. Give an overview of the surgical procedure. Discuss the purpose and expected outcomes of the surgery. Discuss the immediate postoperative care and possible complications.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
PLASTIC AND RECONSTRUCTIVE SURGERY		**10**	**2**
Lessons to include but not limited to:			
Breast augmentation Tissue grafts Selastic implants Facial reconstruction Cosmetic surgery	Discuss relevant anatomy. Describe the pathology that prompts surgical intervention and the related terminology. Discuss any special preoperative diagnostic procedures/tests. Discuss any special preoperative preparation procedures. Identify the names and uses of special instruments, supplies, and drugs. Identify the names and uses of special equipment. Discuss the intraoperative preparation of the patient. Give an overview of the surgical procedure. Discuss the purpose and expected outcomes of the surgery. Discuss the immediate postoperative care and possible complications.		

SPECIFIC TECHNICAL

SUR 103 - Surgical Procedures I

Resources

Books

Allen, N. C., & Gulczynski, D. (1984). *Surgical technology examination review* (3rd ed.). New York: Medical Examination Publishing.

Allmers, N., & Verderame, A. (1987). *Appleton & Lange's review for the surgical technology examination, ARCO* (2nd ed.). New York: Appleton & Lange.

Anatomical insights: The abdomen. (1982). Somerville, NJ: Ethicon.

Anderson, R. M., & Romfh, R. F. (1980). *Technique in the use of surgical tools*. East Norwalk, CT: Appleton & Lange.

Apfelberg, D. B. (Ed.). (1986). *Evaluation and installation of surgical laser systems*. New York: Springer-Verlag.

Association of Surgical Technologists. (1990). *Core curriculum for surgical technology*. Littleton, CO: Author.

Atkinson, L. J., & Kohn, M. J. (1986). *Berry & Kohn's introduction to operating room technique* (6th ed.). New York: McGraw-Hill.

Ball, K. (1990). *Lasers: The perioperative challenge*. St. Louis: Mosby.

Berkow, R. (Ed.). (1987). *The Merck manual of diagnosis and therapy* (15th ed.). Rahway, NJ: Merck, Sharp & Dohme Research Laboratories.

Cooley, D. A., & Wukasch, D. C. (1984). *Techniques in vascular surgery* (2nd ed.). Philadelphia: Saunders.

Cordner, J. W. (1984). *Logic of operating room nursing* (3rd ed.). Oradell, NJ: Medical Economics.

Coy, J. A., Fanta, C. M., Kirschner, C. G., et al. (Eds.). (1988). *Current procedural terminology* (4th ed.). Chicago: American Medical Association.

Crenshaw, A. H. (1986). *Campbell's operative orthopaedics*. St. Louis: Mosby.

Crooks, L. (1979). *Operating room techniques for the surgical team*. Boston: Little, Brown.

Dixon, J. A. (1983). *Surgical application of lasers.* Chicago: Year Book Medical Publishers.

Evans, M., & Black, M. (1990). *Surgical nursing.* Springhouse, PA: Springhouse.

Fuller, J. (1986). *Surgical technology: Principles and practice* (2nd ed.). Philadelphia: Saunders.

Goldman, M. (1988). *Pocket guide to the operating room*. Philadelphia: Davis.

Grewe, H., & Kremer, K. (1983). *Atlas of surgical operations* (5th ed.). Philadelphia: Saunders.

Gruendemann, B. J., & Rothrock, J. (1990). *Alexander's care of the patient in surgery* (9th ed.). St. Louis: Mosby.

Hardy, J. D. (1988). *Hardy's textbook of surgery* (2nd ed.). Philadelphia: Lippincott.

Hartman, & Kellum. (1984). *Surgical procedures: Student manual.* Mid-America Vocational Curriculum Consortium.

Hole, J. W., Jr. (1987). *Human anatomy and physiology* (4th ed.). Dubuque, IA: Wm. C. Brown.

James, E., Corry, R., & Perry, J. (Eds.). (1987). *Basic surgical practice.* St. Louis: Mosby.

Kempe, L. G. (1985). *Operative neurosurgery* (Vols. 1-2). New York: Springer-Verlag.

Le Maitre, G., & Finnegan, J. A. (1987). *Surgery of the gallbladder and bile ducts.* Philadelphia: Saunders.

Le Maitre, G., & Finnegan, J. A. (1980). *The patient in surgery: A guide for nurses* (4th ed.). Philadelphia: Saunders.

Liechty, R. D., & Soper, R. T. (1985). *Synopsis of surgery* (5th ed.). St. Louis: Mosby.

Marieb, E. (1988). *Essentials of human anatomy and physiology* (2nd ed.). Menlo Park, CA: Benjamin-Cummings.

McGregor, I. A. (1989). *Fundamental techniques of plastic surgery* (8th ed.). New York: Churchill Livingstone.

Morel, A., & Wise, G. (1979). *Urologic endoscopic procedures* (2nd ed.). St. Louis: Mosby.

Mosby. (1990). *Nursing drug reference.* St. Louis: Author.

Netter, F. H. (1987). *The CIBA collection of medical illustrations* (Vols. 1-7). Summit, NJ: CIBA Medical Education Division.

Nora, P. F. (Ed.). (1990). *Operative surgery: Principles and techniques* (3rd ed.). Philadelphia: Saunders.

Nursing care of the patient in the O. R. (1975). Somerville, NJ: Ethicon.

Nursing 90 drug handbook. (1990). Springhouse, PA: Intermed Communications.

Ossoff, R. H., & Duncavage. (1989). *Lasers in otolaryngology: Head and neck surgery.* St. Louis: Mosby.

Rushton, N., Greatorex, R. A., & Broughton, N. S. (1985). *Colour atlas of surgical exposures of the limbs.* New York: State Mutual Book.

Rutherford, R. B. (1989). *Vascular surgery* (Vols. 1-2). (3rd ed.). Philadelphia: Saunders.

Sabiston, D. C. (1986). *Textbook of surgery: The biological basis of modern surgical practice* (13th ed.). Philadelphia: Saunders.

Sabiston, D. C. (1987). *Essentials of surgery*. Philadelphia: Saunders.

Schwartz, S. I., et al. (1988). *Principles of surgery* (5th ed.). New York: McGraw-Hill.

Spitz, & Nixon. (1986). *Rob and Smith's operative surgery: Paediatric surgery* (4th ed.). St. Louis: Mosby.

Stillman, R. (Ed.). (1989). *Surgery, diagnosis, and therapy, 89/90.* East Norwalk, CT: Appleton & Lange.

Sundberg, M. C. (1986). *Fundamentals of nursing.* Boston: Jones & Bartlett.

Szulec, J. A., & Szulec, Z. (1980). *A syllabus for the surgeon's secretary* (3rd ed.). Grosse Pointe, MI: Medical Arts.

Tessier, C. J. (1981). *The surgical word book.* Philadelphia: Saunders.

Tessier, C. J. (1987). *General surgery: Facts on file.* Philadelphia: Saunders.

Thomas, C. L. (Ed.). (1989). *Taber's cyclopedic medical dictionary* (16th ed.). Philadelphia: F. A. Davis.

United States Surgical Corp. (1988). *Stapling techniques in general surgery* (3rd ed.). East Norwalk, CT: Author.

Van Way, C. W., III, & Buerk, C. (1989). *Surgical skills in patient care* (2nd ed.). St. Louis: Mosby.

Warden-Tamparo, C. (1989). *Diseases of the human body.* Philadelphia: F. A. Davis.

Welch, K. J. (1986). *Pediatric surgery.* Chicago: Year Book Medical Publishers.

Williams, B., & Graczyk, P. (1988). *Ophthalmic surgical assisting.* Thorogare, NJ: Charles B. Slack.

Wound closure manual: Use and handling of suture. (1986). Somerville, NJ: Ethicon.

Zollinger, R. M., & Zollinger, R. M., Jr. (1983). *Atlas of surgical operations* (5th ed.). New York: Macmillan.

Refer to policy and procedural manual at affiliate sites for practicum specific resources.

Audiovisuals

Aids precautions in O. B., DG 1639 [Film]. Danbury, CT: Davis & Geck.

Billroth II [Film]. Cincinnati: Merrell Dow Film Library.

Breast cancer and mastectomy, #247 [Film]. Garden Grove, CA: Trainex.

Breast diseases, #1014 [Film]. Garden Grove, CA: Trainex.

C-section [Film]. Wayne, NJ: Karol Media.

The care of the patient with minimal cancer of the breast, DG-1282 [Film]. Danbury, CT: American College of Surgeons, Surgical Film Library.

Cesarean birth [Film]. Medcon.

Colon surgery: At high risk, S108 [Film]. St. Paul, MN: 3-M Surgical Products Division, Film Library.

Coping with stress [Videocassette]. Morris Video.

Dealing with difficult people [Film]. Phoenix: BFKA.

Diagnosis and surgical treatment of orbital fractures, ACS 1471 [Film]. Danbury, CT: Davis & Geck.

Extended esophageal myotomy, modified short nissen fundoplication in diffuse esophageal spasm, ACS 1442 [Film]. Danbury, CT: Davis & Geck.

Fetal evaluation [Film]. Wayne, NJ: Karol Media.

Inner woman [Film]. Cincinnati: Merrell Dow Film Library.

Labor and delivery [Film]. Medcon.

Laparoscopy: The view within [Film]. Cincinnati: Merrell Dow Film Library.

Low anterior resection with staples, DG 1610 [Film]. Danbury, CT: Davis & Geck.

Management and operating room support of the burn patient, #2594 [Film]. Somerville, NJ: Ethicon.

Newborn care [Film]. Medcon.

Normal labor and delivery [Film]. Wayne, NJ: Karol Media.

Nurses view of endoscopy, DG 1603 [Film]. Danbury, CT: Davis & Geck.

Operating room draping No. 1: Mastectomy and lithotomy, #PC 205 [Film]. Garden Grove, CA: Trainex.

Operating room draping No. 2: Thoracotomy, laparotomy, and extremity, #PC 206 [Film]. Garden Grove, CA: Trainex.

Operative management of breast cancer, ACS 1485 [Film]. Danbury, CT: Davis & Geck.

Postpartum care [Film]. Medcon.

Postpartum hemorrhage [Film]. Wayne, NJ: Karol Media.

Pre-eclampsia [Film]. Wayne, NJ: Karol Media.

Right radical nephrectomy, ACS 1291 [Film]. Danbury, CT: Davis & Geck.

Splenectomy, ACS 1346 [Film]. Danbury, CT: Davis & Geck.

Techniques for lower limb amputation, DG 1594 [Film]. Danbury, CT: Davis & Geck.

Tension free hernia repair, DG 1645 [Film]. Danbury, CT: Davis & Geck.

Thyroid diseases: Diagnosis and treatment, #1020 [Film]. Garden Grove, CA: Trainex.

Thyroidectomy, DG 1575 [Film]. Danbury, CT: Davis & Geck.

Total abdominal hysterectomy, DG 1474 [Film]. Danbury, CT: Davis & Geck.

Tubal ligation, #590 [Film]. Garden Grove, CA: Trainex.

Vaginitis [Film]. Cincinnati: Merrell Dow Film Library.

Journals

AORN Journal
Asepsis
New Journal
O.R. Nurse

Point of View
Surgical Rounds
The Surgical Technologist

Engeman, S. A. (1984). The burned patient: Perioperative nursing care. *AORN Journal, 40*, 36-41.

Park, R. (1984). Anesthesia for the burned patient. *AORN Journal, 40*, 42-47.

SPECIFIC TECHNICAL

SUR 104 - Surgical Procedures II

Course Overview

Course Description

Continues development of student knowledge and skills applicable to specialty surgery areas. Topics include: ophthalmic surgery, orthopedic surgery, thoracic surgery, vascular surgery, cardiovascular surgery, and neurosurgery.

Competency Areas

Ophthalmic Surgery
Orthopedic Surgery
Thoracic Surgery
Vascular Surgery
Cardiovascular Surgery
Neurosurgery

Prerequisite

SUR 103

Credit Hours

6

Contact Hours Per Week

Class - 5

D.Lab - 2

SPECIFIC TECHNICAL

SUR 104 - Surgical Procedures II

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	Lab
OPHTHALMIC SURGERY		**10**	**2**
Lessons to include but not limited to:			
Strabismus Retinal detachment Corneal transplant Cataract Enucleation	Discuss relevant anatomy. Describe the pathology that prompts surgical intervention and the related terminology. Discuss any special preoperative diagnostic procedures/tests. Discuss any special preoperative preparation procedures. Identify the names and uses of special instruments, supplies, and drugs. Identify the names and uses of special equipment. Discuss the intraoperative preparation of the patient. Give an overview of the surgical procedure. Discuss the purpose and expected outcomes of the surgery.		

Recommended Outline	After completing this section, the student will:	Hours Class	Lab
	Discuss the immediate postoperative care and possible complications.		
ORTHOPEDIC SURGERY		**10**	**8**
Lessons to include but not limited to:			
Internal fixations External fixations IM rods Arthroscopy Joint replacement Spinal procedures Extremity procedures	Discuss relevant anatomy. Describe the pathology that prompts surgical intervention and the related terminology. Discuss any special preoperative diagnostic procedures/tests. Discuss any special preoperative preparation procedures. Identify the names and uses of special instruments, supplies, and drugs. Identify the names and uses of special equipment. Discuss the intraoperative preparation of the patient. Give an overview of the surgical procedure. Discuss the purpose and expected outcomes of the surgery. Discuss the immediate postoperative care and possible complications.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
THORACIC SURGERY		**6**	**3**

Lessons to include but not limited to:

Endoscopy Thoracotomy Pneumonectomy Lung biopsy Insertion of chest tube	Discuss relevant anatomy. Describe the pathology that prompts surgical intervention and the related terminology. Discuss any special preoperative diagnostic procedures/tests. Discuss any special preoperative preparation procedures. Identify the names and uses of special instruments, supplies, and drugs. Identify the names and uses of special equipment. Discuss the intraoperative preparation of the patient. Give an overview of the surgical procedure. Discuss the purpose and expected outcomes of the surgery. Discuss the immediate postoperative care and possible complications.

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
VASCULAR SURGERY		**6**	**2**

Lessons to include but not limited to:

Carotid endarterectomy	Discuss relevant anatomy.
Embolectomy	
Graft procedures	Describe the pathology that prompts surgical intervention and the related terminology.
Venous access procedures	
Peripheral bypass procedures	
Aneurysms	Discuss any special preoperative diagnostic procedures/tests.
	Discuss any special preoperative preparation procedures.
	Identify the names and uses of special instruments, supplies, and drugs.
	Identify the names and uses of special equipment.
	Discuss the intraoperative preparation of the patient.
	Give an overview of the surgical procedure.
	Discuss the purpose and expected outcomes of the surgery.
	Discuss the immediate postoperative care and possible complications.

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
CARDIOVASCULAR SURGERY		**8**	**2**
Lessons to include but not limited to:			
Congenital anomalies (coronary artery bypass graft) Pacemaker Valve replacement	Discuss relevant anatomy. Describe the pathology that prompts surgical intervention and the related terminology. Discuss any special preoperative diagnostic procedures/tests. Discuss any special preoperative preparation procedures. Identify the names and uses of special instruments, supplies, and drugs. Identify the names and uses of special equipment. Discuss the intraoperative preparation of the patient. Give an overview of the surgical procedure. Discuss the purpose and expected outcomes of the surgery. Discuss the immediate postoperative care and possible complications.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
NEUROSURGERY		**10**	**3**
Lessons to include but not limited to:			
Craniotomy Shunt procedures Lumbar laminectomy Stereotaxic procedures	Discuss relevant anatomy. Describe the pathology that prompts surgical intervention and the related terminology. Discuss any special preoperative diagnostic procedures/tests. Discuss any special preoperative preparation procedures. Identify the names and uses of special instruments, supplies, and drugs. Identify the names and uses of special equipment. Discuss the intraoperative preparation of the patient. Give an overview of the surgical procedure. Discuss the purpose and expected outcomes of the surgery. Discuss the immediate postoperative care and possible complications.		

SPECIFIC TECHNICAL

SUR 104 - Surgical Procedures II

Resources

Books

Allen, N. C., & Gulczynski, D. (1984). *Surgical technology examination review* (3rd ed.). New York: Medical Examination.

Anatomical insights: The abdomen. (1982). Somerville, NJ: Ethicon.

Anderson, R. M., & Romfh, R. F. (1980). *Technique in the use of surgical tools*. East Norwalk, CT: Appleton & Lange.

Association of Surgical Technologists. (1990). *Core curriculum for surgical technology*. Littleton, CO: Author.

Atkinson, L. J., & Kohn, M. J. (1986). *Berry & Kohn's introduction to operating room technique* (6th ed.). New York: McGraw-Hill.

Berkow, R. (Ed.). (1987). *The Merck manual of diagnosis and therapy* (15th ed.). Rahway, NJ: Merck, Sharp & Dohme Research Laboratories.

Blauvelt, & Nelson. (1985). *A manual of orthopedic terminology* (3rd ed.). St. Louis: Mosby.

Brooks, S. M. (1982). *Instrumentation for the operating room: A photographic manual* (2nd ed.). St. Louis: Mosby.

Cooley, D. A., & Wukasch, D. C. (1984). *Techniques in vascular surgery* (2nd ed.). Philadelphia: Saunders.

Cordner, J. W. (1984). *Logic of operating room nursing* (3rd ed.). Oradell, NJ: Medical Economics.

Coy, J. A., Fanta, C. M., Kirschner, C. G., et al. (Eds.). (1988). *Current procedural terminology* (4th ed.). Chicago: American Medical Association.

Crenshaw, A. H. (1986). *Campbell's operative orthopaedics* (7th ed.). St. Louis: Mosby.

Crooks, L. (1979). *Operating room techniques for the surgical team.* Boston: Little, Brown.

Dixon, J. A. (1983). *Surgical application of lasers.* Chicago: Year Book Medical Publishers.

Evans, M., & Black, M. (1990). *Surgical nursing.* Springhouse, PA: Springhouse.

Fuller, J. (1986). *Surgical technology: Principles and practice* (2nd ed.). Philadelphia: Saunders.

Goldman, M. (1988). *Pocket guide to the operating room.* Philadelphia: F. A. Davis.

Grewe, H., & Kremer, K. (1983). *Atlas of surgical operations* (5th ed.). Philadelphia: Saunders.

Gruendmann, B. J., & Rothrock, J. (1990). *Alexander's care of the patient in surgery* (9th ed.). St. Louis: Mosby.

Hardy, J. D. (1988). *Hardy's textbook for surgery* (2nd ed.). Philadelphia: Lippincott.

Hartman, & Kellum. (1984). *Surgical procedures: Student manual.* Mid-America Vocational Curriculum Consortium.

Hole, J. W., Jr. (1987). *Human anatomy and physiology.* Dubuque, IA: Wm. C. Brown.

James, E., Corry, R., & Perry, J. (Eds.). (1987). *Principles of basic surgical practice.* St. Louis: Mosby.

Kempe, L. G. (1985). *Operative neurosurgery* (Vols. 1-2). New York: Springer-Velag.

Leichty, R. D., & Soper, R. T. (1985). *Synopsis of surgery.* St. Louis: Mosby.

Leichty, R. D., & Soper, R. T. (1989). *Fundamentals of surgery* (6th ed.). St Louis: Mosby.

Maneb, F. (1988). *Essentials of human anatomy and physiology* (2nd ed.). Menlo Park, CA: Benjamin-Cummings.

McGregor, I. A. (1989). *Fundamental techniques of plastic surgery* (8th ed.). New York: Churchill Livingstone.

Mosby. (1990). *Nursing drug reference.* St. Louis: Mosby.

Netter, F. H. (1987). *The CIBA collection of medical illustrations* (Vols. 1-7). Summit, NJ: Medical Education Division.

Nora, P. F. (Ed.). (1990). *Operative surgery: Principles and techniques* (3rd ed.). Philadelphia: Saunders.

Nursing care of the patient in the O.R. (1987). Somerville, NJ: Ethicon.

Nursing 90 drug handbook. (1990). Springhouse, PA: Intermed Communications.

Ossoff, R. H., & Duncavage. (1989). *Lasers in otolaryngology: Head and neck surgery.* St. Louis: Mosby.

Ravitch, M. M. (1987). *Cardiac surgery*. Philadelphia: F. A. Davis.

Ravitch, M. M., & Steichen, F. M. (1988). *Atlas of general thoracic surgery*. Philadelphia: Saunders.

Richards, N. V. (1987). *Heart to heart: The Cleveland clinic guide to understanding heart disease and open heart surgery*. New York: Atheneum.

Rodrigo. (1986). *Orthopedic surgery: Basic science and clinical science*. Boston: Little, Brown.

Rushton, N., Greatorex, R. A., & Broughton, N. S. (1985). *Colour atlas of surgical exposures of the limbs.* New York: State Mutual Books.

Rutherford, R. B. (1989). *Vascular surgery* (Vols. 1-2). (3rd ed.). Philadelphia: Saunders.

Sabiston, D. C. (1986). *Textbook of surgery: The biological basis of modern surgical practice* (13th ed.). Philadelphia: Saunders.

Sabiston, D. C. (1987). *Essentials of surgery*. Philadelphia: Saunders.

Schwartz, S. I., et al. (1988). *Principles of surgery* (5th ed.). New York: McGraw-Hill.

Spitz, & Nixon. (1986). *Rob and Smith's operative surgery: Paediatric surgery* (4th ed.). St. Louis: Mosby.

Stillman, R. (Ed.). (1989). *Surgery, diagnosis, and therapy, 89/90.* East Norwalk, CT: Appleton & Lange.

Sundberg, M. C. (1986). *Fundamentals of nursing.* Boston: Jones & Bartlett.

Szulec, J. A., & Szulec, Z. (1980). *A syllabus for the surgeon's secretary* (3rd ed.). Grosse Pointe, MI: Medical Arts.

Tessier, C. J. (1988). *General surgery: Facts on file.* Philadelphia: Saunders.

Thomas, C. L. (Ed.). (1989). *Taber's cyclopedic medical dictionary* (16th ed.). Philadelphia: F. A. Davis.

United States Surgical Corp. (1988). *Stapling techniques in general surgery* (3rd ed.). East Norwalk, CT: Author.

Van Way, C. W., III, & Buerk, C. (1989). *Surgical skills in patient care* (2nd ed.). St. Louis: Mosby.

Warden-Tamparo, C. (1989). *Diseases of the human body.* Philadelphia: F. A. Davis.

Welch, K. J. (1986). *Pediatric surgery.* Chicago: Year Book Medical Publishers.

Williams, B., & Graczyk, P. (1988). *Ophthalmic surgical assisting.* Thorogare, NJ: Charles B. Slack.

Yocum, L. A. (1990). *Inside orthopedic surgery: An illustrated guide.* Skilman, NJ: Johnson & Johnson.

Zollinger, R. M., & Zollinger, R. M., Jr. (1983). *Atlas of surgical operations* (5th ed.). New York: Macmillan.

Refer to policy and procedural manual at affiliate sites for practicum specific resources.

Audiovisuals

Care of the total joint patient, DG 1516 [Film]. Danbury, CT: Davis & Geck.

Coping with stress [Videocassette]. Morris Video.

Dealing with difficult people [Film]. Phoenix: BFKA.

Draping the orthopaedic patient, DG 1148 [Film]. Danbury, CT: Davis & Geck.

Intraoperative nursing care of adult craniotomy patient, DG 1554 [Film]. Danbury, CT: Davis & Geck.

Operating room draping No. 2: Thoracotomy, laparotomy, and extremity, # PC 206 [Film]. Garden Grove, CA: Trainex.

O. R. view radiography, DG 1358 [Film]. Danbury, CT: Davis & Geck.

Powered surgical instruments: The perioperative challenge, DG 1641 [Film]. Danbury, CT: Davis & Geck.

Sports medicine: The arthroscopy patient, DG 1643 [Film]. Danbury, CT: Davis & Geck.

Journals

American Journal of Nursing
ASESIS
RN Magazine
Nursing 90

SPECIFIC TECHNICAL

SUR 113 - Specialty Surgical Practicum

Course Overview

Course Description

Continues development of surgical team participation through clinical experience. Emphasis is placed on observation of and/or participation in routine procedures and procedures for general and specialty surgery. Topics include: assistance, scrubbing, and circulation on routine procedures; and participation in or observation of surgical teams involved with general, gastrointestinal, obstetrical and gynecological, genitourinary, head and neck, and plastic and reconstructive surgery.

Competency Areas

Participation in and/or Observation of General Surgery
Participation in and/or Observation of Gastrointestinal Surgery
Participation in and/or Observation of Obstetrical and Gynecological Surgery
Participation in and/or Observation of Genitourinary Surgery
Participation in and/or Observation of Head and Neck Surgery
Participation in and/or Observation of Plastic and Reconstructive Surgery

Prerequisite/Corequisite

SUR 103

Credit Hours

8

Contact Hours Per Week

Class - 0

O.B.I. - 24

SPECIFIC TECHNICAL

SUR 113 - Specialty Surgical Practicum

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	Hours OBI
PARTICIPATION IN AND/OR OBSERVATION OF GENERAL SURGERY		**0**	**(240)**
Hernias	Participate in and/or observe secondary scrub procedures on child and adult hernia surgery.		
Breast biopsy	Participate in and/or observe secondary scrub procedures on a breast biopsy of either a permanent or frozen specimen.		
Mastectomy	Participate in and/or observe secondary scrub procedures on a mastectomy.		
Superficial cysts, lesions, or tumors	Participate in and/or observe secondary scrub procedures on superficial cysts, lesions, or tumors.		
Thyroidectomy	Participate in and/or observe secondary scrub procedures on a thyroidectomy.		
Incision and drainage	Participate in and/or observe secondary scrub procedures on incision and drainage.		
Vein ligation	Participate in and/or observe secondary scrub procedures on vein ligation.		

Recommended Outline	After completing this section, the student will:	Hours Class	OBI
PARTICIPATION IN AND/OR OBSERVATION OF GASTROINTESTINAL SURGERY		**0**	**(240)**
Appendectomy	Participate in and/or observe secondary scrub procedures on an appendectomy.		
Cholecystectomy with cholangiogram	Participate in and/or observe secondary scrub procedures on a cholecystectomy with cholangiogram.		
Excision of tumor and biopsies from gastrointestinal tract	Participate in and/or observe secondary scrub procedures on an excision of tumors and biopsies from the gastrointestinal tract.		
Gastrointestinal endoscopy	Participate in and/or observe secondary scrub procedures on a gastrointestinal endoscopy.		
Hemorrhoidectomy	Participate in and/or observe secondary scrub procedures on a hemorrhoidectomy.		
Anal fissure	Participate in and/or observe secondary scrub procedures on an anal fissure.		
PARTICIPATION IN AND/OR OBSERVATION OF OBSTETRICAL AND GYNECOLOGICAL SURGERY		**0**	**(240)**
Dilation and curettage	Participate in and/or observe secondary scrub procedures on a dilation and curettage.		

Recommended Outline	After completing this section, the student will:	Hours Class	OBI
Laparoscopy	Participate in and/or observe secondary scrub procedures on a laparoscopy.		
Total abdominal hysterectomy	Participate in and/or observe secondary scrub procedures on a total abdominal hysterectomy.		
Total vaginal hysterectomy	Participate in and/or observe secondary scrub procedures on a total vaginal hysterectomy.		
Cesarean section	Participate in and/or observe secondary scrub procedures on a Cesarean section.		
Tubal ligation	Participate in and/or observe secondary scrub procedures on a tubal ligation.		
Cervical procedures	Participate in and/or observe secondary scrub procedures on cervical procedures.		
PARTICIPATION IN AND/OR OBSERVATION OF GENITOURINARY SURGERY		**0**	**(240)**
Orchiectomy	Participate in and/or observe secondary scrub procedures and/or assist circulator on an orchiectomy.		
Hydrocelectomy	Participate in and/or observe secondary scrub procedures and/or assist circulator on a hydrocelectomy.		

Recommended Outline	After completing this section, the student will:	Hours Class	OBI
Circumcision	Participate in and/or observe secondary scrub procedures and/or assist circulator on a circumcision.		
Cysto/T.U.R.P.	Participate in and/or observe secondary scrub procedures and/or assist circulator on a cystoscopy/T.U.R.P.		
Retrograde pyelogram	Participate in and/or observe secondary scrub procedures and/or assist circulator on a retrograde pyelogram.		
PARTICIPATION IN AND/OR OBSERVATION OF HEAD AND NECK SURGERY		**0**	**(240)**
Tonsillectomy	Participate in and/or observe secondary scrub procedures and/or assist circulator on a tonsillectomy.		
Adenoidectomy	Participate in and/or observe secondary scrub procedures and/or assist circulator on an adenoidectomy.		
Myringotomy/tubes	Participate in and/or observe secondary scrub procedures and/or assist circulator on a myringotomy/tubes.		

Recommended Outline	After completing this section, the student will:	Hours Class	OBI
PARTICIPATION IN AND/OR OBSERVATION OF PLASTIC AND RECONSTRUCTIVE SURGERY		**0**	**(240)**
Rhinoplasty	Participate in and/or observe secondary scrub procedures and/or assist circulator on a rhinoplasty.		
Abdominoplasty	Participate in and/or observe secondary scrub procedures and/or assist circulator on an abdominoplasty.		
Reduction mammoplasty	Participate in and/or observe secondary scrub procedures and/or assist circulator on a reduction mammoplasty.		
Mammary augmentation	Participate in and/or observe secondary scrub procedures and/or assist circulator on a mammary augmentation.		
Suction lipectomy	Participate in and/or observe secondary scrub procedures and/or assist circulator on a suction lipectomy.		
Maxillofacial reconstruction	Participate in and/or observe secondary scrub procedures and/or assist circulator on a maxillofacial reconstruction.		
Tissue graph procedures	Participate in and/or observe secondary scrub procedures and/or assist circulator on a tissue graph procedure.		

Recommended Outline	After completing this section, the student will:	Hours Class OBI
Muscle flap	Participate in and/or observe secondary scrub procedures and/or assist circulator on a muscle flap.	
Rhytidectomy	Participate in and/or observe secondary scrub procedures and/or assist circulator on a rhytidectomy.	
Blepharoplasty	Participate in and/or observe secondary scrub procedures and/or assist circulator on a blepharoplasty.	

SPECIFIC TECHNICAL

SUR 113 - Specialty Surgical Practicum

Resources

See resource pages from SUR 103.

SPECIFIC TECHNICAL

SUR 114 - Advanced Specialty Surgical Practicum

Course Overview

Course Description

Provides opportunity for students to complete all required surgical technology procedures through participation in and/or observation of surgery in the hospital environment or simulations in the technical institute. Topics include: primary scrub on general and specialty surgical procedures; secondary scrub on expanded specialty procedures; participation in and/or observation of a surgical team conducting ophthalmic, orthopedic, plastic, thoracic, vascular, cardiovascular, and neurosurgery procedures; and completion of all required surgical technology clinical competencies.

Competency Areas

Primary Scrub on Specialty Surgical Procedures
Participation in and/or Observation of a Surgical Team
Conducting Ophthalmic, Orthopedic, Thoracic, Vascular,
Cardiovascular, and Neurosurgery Procedures
Completion of All Required Surgical Clinical Competencies

Prerequisite/Corequisite

SUR 104

Credit Hours

8

Contact Hours Per Week

Class - 0

O.B.I. - 24

SPECIFIC TECHNICAL

SUR 114 - Advanced Specialty Surgical Practicum

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	OBI
PRIMARY SCRUB ON SPECIALTY SURGICAL PROCEDURES		**0**	**(240)**
General surgery	Identify the operative sequence in the opening and closing phases of the surgical incision. Identify the operative sequence for common surgical operations. Demonstrate appropriate usage of instrumentation, sutures, drains, sponges, and dressings. Identify specific learned responses to common types of complication associated with surgical procedures. Demonstrate specific learned responses to common types of complication associated with surgical procedures. Identify the common sequence of actions and events related to pathology that the procedure is intended to repair, remove, or reconstruct.		

Recommended Outline	After completing this section, the student will:	Hours Class OBI
Obstetrical and gynecological surgery	Identify the operative sequence in the opening and closing phases of the female abdominal and vaginal surgical incision.	
	Identify the operative sequence for common female abdominal and vaginal surgical operations.	
	Demonstrate appropriate usage of instrumentation, sutures, drains, sponges, and dressings.	
	Identify specific learned responses to common types of complication associated with female abdominal and vaginal surgical procedures.	
	Demonstrate specific learned responses to common types of complication associated with female abdominal and vaginal surgical procedures.	
	Identify the common sequence of actions and events related to pathology that the female abdominal and vaginal surgical procedure is intended to repair, remove, or reconstruct.	
Gastrointestinal surgery	Identify the operative sequence in the opening and closing phases of the upper and lower gastrointestinal surgical incision.	

Recommended Outline	After completing this section, the student will:	Hours Class OBI
	Identify the operative sequence for common upper and lower gastrointestinal surgical operations.	
	Demonstrate appropriate usage of instrumentation, sutures, drains, sponges, and dressings.	
	Identify specific learned responses to common types of complication associated with upper and lower gastrointestinal surgical procedures.	
	Demonstrate specific learned responses to common types of complication associated with upper and lower gastrointestinal surgical procedures.	
	Identify the common sequence of actions and events related to pathology that the upper and lower gastrointestinal surgical procedure is intended to repair, remove, or reconstruct.	
Genitourinary surgery	Identify the operative sequence in the opening and closing phases of the genitourinary surgical incision, including the male reproductive system.	
	Identify the operative sequence for common genitourinary surgical operations, including the male reproductive system.	

Recommended Outline	After completing this section, the student will:	Hours Class OBI
	Demonstrate appropriate usage of instrumentation, sutures, drains, sponges, and dressings.	
	Identify specific learned responses to common types of complication associated with genitourinary surgical procedures, including the male reproductive system.	
	Demonstrate specific learned responses to common types of complication associated with genitourinary surgical procedures, including the male reproductive system.	
	Identify the common sequence of actions and events related to pathology that the male reproductive system and genitourinary surgical procedure is intended to repair, remove, or reconstruct.	
Head and neck surgery	Identify the operative sequence in the opening and closing phases of the otologic and nasolaryngologic surgical incision.	
	Identify the operative sequence for common otologic and nasolaryngologic surgical operations.	
	Demonstrate appropriate usage of instrumentation, sutures, drains, sponges, and dressings.	

Recommended Outline	After completing this section, the student will:	Hours Class OBI
	Identify specific learned responses to common types of complication associated with otologic and nasolaryngologic surgical procedures.	
	Demonstrate specific learned responses to common types of complication associated with otologic and nasolaryngologic surgical procedures.	
	Identify the common sequence of actions and events related to pathology that the otologic and nasolaryngologic surgical procedure is intended to repair, remove, or reconstruct.	
Plastic and reconstructive surgery	Identify the operative sequence in the opening and closing phases of the repair and reconstruction of congenital, developmental, and traumatic deformities.	
	Identify the operative sequence for common repair and reconstruction of congenital, developmental, and traumatic deformities.	
	Demonstrate appropriate usage of instrumentation, sutures, drains, sponges, and dressings.	

Recommended Outline	After completing this section, the student will:	Hours Class	OBI
	Identify specific learned responses to common types of complications associated with repair and reconstruction of congenital, developmental, and traumatic deformities.		
	Demonstrate specific learned responses to common types of complications associated with repair and reconstruction of congenital, developmental, and traumatic deformities.		
	Identify the common sequence of actions and events related to pathology that the repair and reconstruction of congenital, developmental, and traumatic deformities is intended to repair, remove, or reconstruct.		
PARTICIPATION IN AND/OR OBSERVATION OF A SURGICAL TEAM CONDUCTING OPHTHALMIC, ORTHOPEDIC, THORACIC, VASCULAR, CARDIOVASCULAR, AND NEUROSURGERY PROCEDURES		**0**	**(240)**
Ophthalmic surgery	Assist and/or scrub with the surgical team in selected eye procedures.		
Orthopedic surgery	Assist and/or scrub with the surgical team in selected orthopedic procedures.		

Recommended Outline	After completing this section, the student will:	Hours Class	OBI
Thoracic surgery	Assist and/or scrub with the surgical team in selected procedures concerned with pulmonary diseases.		
Vascular surgery	Assist and/or scrub with the surgical team in selected procedures concerned with repair and reconstruction of blood vessel defects.		
Cardiovascular surgery	Assist and/or scrub with the surgical team in selected cardiovascular procedures.		
Neurosurgery	Assist and/or scrub with the surgical team in selected neurosurgical procedures, including surgical lesions.		
COMPLETION OF ALL REQUIRED SURGICAL CLINICAL COMPETENCIES		**0**	**(240)**
	Complete all competency areas in SUR 112, SUR 113, and SUR 114.		

SPECIFIC TECHNICAL

SUR 114 - Advanced Specialty Surgical Practicum

Resources

See resource pages from SUR 104.

SPECIFIC TECHNICAL

SUR 124 - Seminar in Surgical Technology

Course Overview

Course Description

Prepares students for entry into careers as surgical technologists and enables them to effectively review for the national certification examination. Topics include: professional preparation, certification review, and test-taking skills.

Competency Areas

Professional Preparation
Certification Review
Test-Taking Skills

Prerequisite/Corequisite

SUR 114

Credit Hours

3

Contact Hours Per Week

Class - 3

Lab - 0

SPECIFIC TECHNICAL

SUR 124 - Seminar in Surgical Technology

Course Outline

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
PROFESSIONAL PREPARATION		**8**	**0**
Conflict resolution	Identify conflict associated with the role of surgical technologist.		
	Resolve conflict associated with the role of surgical technologist.		
Employability skills	Demonstrate the steps taken to determine employment.		
	Discuss strategies for maintaining employment.		
	Demonstrate steps in terminating employment.		
Ethical, moral, and legal responsibilities	Discuss records and documentation.		
	Review records and documentation.		
	Discuss consent.		
	Review consent.		
	Discuss ethical and legal responsibilities.		
	Review ethical and legal responsibilities.		

Recommended Outline	After completing this section, the student will:	Hours Class	Lab
Professional organization	Discuss the history, purpose, and organizational structure of the Association of Surgical Technologists, Inc.		
	Review accreditation guidelines.		
	Discuss steps to take to become a certified surgical technologist (CST).		
CERTIFICATION REVIEW		**20**	**0**
Basic sciences	Discuss anatomy, physiology, and medical terminology.		
	Review anatomy, physiology, and medical terminology.		
	Discuss microbiology to include wound healing, microorganisms, immunology, sterilizing, and disinfecting.		
	Review microbiology to include wound healing, microorganisms, immunology, sterilizing, and disinfecting.		
	Discuss pharmacology and anesthesia.		
	Review pharmacology and anesthesia.		
Aseptic technique	Review principles of aseptic technique.		
	Review principles of sterilization.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Review scrubbing, gowning, and gloving.		
Operating room environment	Discuss occupational hazards.		
	Review occupational hazards.		
	Discuss O. R. sanitation.		
	Review O. R. sanitation.		
	Discuss O. R. equipment.		
	Review O. R. equipment.		
	Discuss O. R. safety.		
	Review O. R. safety.		
	Discuss hospital organization.		
	Review hospital organization.		
	Discuss job duties and limitations.		
	Review job duties and limitations.		
	Discuss O. R. physical environment.		
	Review O. R. physical environment.		
Surgical procedures	Discuss preoperative routines.		
	Review preoperative routines.		
	Discuss positioning, prepping, and draping.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Review positioning, prepping, and draping.		
	Discuss supplies and equipment.		
	Review supplies and equipment.		
	Discuss instrumentation.		
	Review instrumentation.		
	Discuss sutures.		
	Review sutures.		
	Discuss specimens.		
	Review specimens.		
	Discuss pathophysiology.		
	Review pathophysiology.		
	Discuss intraoperative sequences.		
	Review intraoperative sequences.		
TEST-TAKING SKILLS		**2**	**0**
Fundamental knowledge for test-taking	Take practice multiple-choice exams.		
	Select the best answer on the practice exam.		

Recommended Outline	After completing this section, the student will:	Hours Class	Hours Lab
	Review scrubbing, gowning, and gloving.		
Operating room environment	Discuss occupational hazards.		
	Review occupational hazards.		
	Discuss O. R. sanitation.		
	Review O. R. sanitation.		
	Discuss O. R. equipment.		
	Review O. R. equipment.		
	Discuss O. R. safety.		
	Review O. R. safety.		
	Discuss hospital organization.		
	Review hospital organization.		
	Discuss job duties and limitations.		
	Review job duties and limitations.		
	Discuss O. R. physical environment.		
	Review O. R. physical environment.		
Surgical procedures	Discuss preoperative routines.		
	Review preoperative routines.		
	Discuss positioning, prepping, and draping.		

Recommended Outline	After completing this section, the student will:	Hours Class	Lab
	Review positioning, prepping, and draping.		
	Discuss supplies and equipment.		
	Review supplies and equipment.		
	Discuss instrumentation.		
	Review instrumentation.		
	Discuss sutures.		
	Review sutures.		
	Discuss specimens.		
	Review specimens.		
	Discuss pathophysiology.		
	Review pathophysiology.		
	Discuss intraoperative sequences.		
	Review intraoperative sequences.		
TEST-TAKING SKILLS		**2**	**0**
Fundamental knowledge for test-taking	Take practice multiple-choice exams.		
	Select the best answer on the practice exam.		

SPECIFIC TECHNICAL

SUR 124 - Seminar in Surgical Technology

Resources

Books

Allen, N. C., & Gulczynski, D. (1984). *Surgical technology examination review* (3rd ed.). New York: Medical Examination.

Chapman, E. N. (1987). *Your attitude is showing* (5th, rev. ed.). Chicago: Science Research Association.

Foxman, L., & Polsky, W. L. (1984). *Resumés that work: How to sell yourself on paper.* New York: John Wiley & Sons.

Jackson, T. (1981). *The perfect resumé*. New York: Doubleday.

Jensen, E. (1989). *Student success secrets* (3rd ed.). Hauppauge, NY: Barron's Educational Series.

Koch, H. W. (1986). *Jobs and how to get them.* San Francisco: Ken Books.

Krannich, R. L. (1988). *Careering and recareering for the 1990s: The complete guide to planning your future.* Manassas, VA: Impact.

Pichard, J. B. (1985). *Winning with words: Secrets of the job interview* (3rd ed.). Tallahassee, FL: Magister.

U.S. Department of Labor. (1984). *Dictionary of occupational titles* (4th ed.). Washington, DC: U.S. Government Printing Office.

Washington, T. (1988). *Resumé power: Selling yourself on paper* (rev. ed.). Bellevue, WA: Mount Vernon.

Zedlitz, R. (1987). *Getting a job in health care, process kit*. Cincinnati: South-Western.

Brochures

Brochures available from Association of Surgical Technologists, Inc:

- AST Guidelines for Continuing Education
- AST National Bylaws
- Certification: What it Means
- Certifying Examination Application Package
- Chapter Information Kit
- Core Curriculum for Surgical Technology - book
- Directory of Certified Surgical Technologists
- History of AST
- Job Description - Certified Surgical Technologist
- National Surgical Technologists Week Packet
- O. R. Team
- A Profile of the Surgical Technologist
- Standards of Practice
- Study and Test Skills for Health Professionals - book
- The Surgical Technologist and Job Security
- Surgical Technology Programs Accredited by CAHEA

Audiovisuals

Does your resumé wear blue jeans: Resumé writing workshop [Videocassette]. Word Store.

Interview techniques and resumé tips for the job applicant [Videocassette]. Bennu Publications.

Interviewing for a job [Videocassette]. Video Resources.

Job hunting in the 1980s: Skills for success [Videocassette].

Job survival skills: Working with others [Videocassette]. Guidance Associates.

Making it work: Making the most of yourself [Videocassette]. Educational Resources Foundations.

Resumés that get interviews: Interviews that get jobs [Videocassette]. Guidance Associates.

Self-fulfillment: Becoming the person you want to be [Videocassette]. Center for Humanities.

Computer Software

Resumé Master Writer
Resumé Writer

APPENDIX A

APPENDIX A

Surgical Technology

Equipment List

Adenoid curettes
Adenotomies curettes
Air equipment (Stryker and Hall)
Air tanks
Ambu resuscitator (Hope)
Anal speculum
Anoscope
Arterial graft
Arthroscope
Aspirators
Atomizer with anesthetic agent
Autoclave
Autoclave, sterilizer
Autosuture devices
Autotransfuser
Babeldight
Baby warmer
Bag-a-jet
Balfour retractor
Basic abdominal set
Basins, stainless steel
Battery box
Biopsy set, basic
Bone screws
Book-walter retractor
Bougies
Bovine grafts
Bronchoscopes
Brown air dermatome
Calipers
Cameras
Cardiac arrest cart w/defibrillator
Cast cutter, electric
Cast knife
Cast spreader
Cataract cryo-extractor
Cataract instrument tray
Catheter stylet
Cautery adapter
Cavitron phaco eye instrument
Chaney retractor
Chest bottles
Chest retractors
Chest tubes
Chisels (asteomes)
Cidex
Clamps
Colonscope
Compression plates
Craig Bx set
Craniotome
Cryo extractor (ophthamolic unit)
Cryo unit
Cryophake
Culdoscope
CVP catheter
Cysto instruments
Cystoscope
D & C set
Dental equipment
Dermabrasion set
Dermatome, drum-type
Dermatome, electric
Dermatome meshgraft
Dialators
Diathermy machine for eye

Doyens (clamp)
Drapes, disposable (paper)
Drapes, muslin
Drills, surgical
Electrosurgical grounding pad
Electrosurgical unit
Embolectomy catheter
ENT drill
ENT instruments
Esophoscope
Eye instruments
Eye microscope
Falope rings
Fiberoptic bronchoscope
Fiberoptic light source
Filiform bougie
Fine neuro instruments
Fluoroscope (C-n Arm)
Foley catheter and insertion set
Footstools
Forceps, obstetrical
Foreign body eye magnet
Foreign body forceps
Fracture table
Gastroscope
Hand surgery table
Head holders
Hemovac drains
Hip nailing equipment
Indirect ophthalmoscope
Instrument stand, stainless steel, adjustable
Instrument table, stainless steel, adjustable
Insulflator
Intercom system
Intramedullary pin-driver
K thermia heating units and spreads
Keratome
Kirschner wires, wire cutter
Kit, arterial major
Knee immobilizers
Knowles pins
Kreisselman resuscitator
Lag screw and compression plates for hip fractures
Lamp, auxiliary lamp
Laparoscopes
Laryngeal mirrors
Laryngoscope
Laser equipment
Lebsche knife & mallet
Light cord
Light source
Linen hamper w/bag
Major laparotomy set-up (linens)
Mediastinal-scope
Micro-ENT prosthesis
Microscopes
Microscopic arterial
Microscopic instruments
Midas rex drill
Mirror, head
Monitor, doptome
Mouth gag
Mucous trap
Nail-driver and extractor, (Smith Petersen)
Needle holders, long arterial
Nephrectomy instrument set
Nephroscopy equipment
ORIF ortho instruments
Orthairtome drill
Orthopedic set, major
Pacemaker with electrodes, implantable
Perfusion tubing and connectors
Plastic instrument tray

Pleural Bx set
Prosthesis, hip
Prosthesis, shoulder
Radiological film viewer for operating room
Receptacle, waste
Resectoscope
Retractors, self-retaining
Rib approximator
Rib shears
Rubber tips (large and small)
Scapula cups and retractors
Scissors, heavy
Scissors, long arterial
Screws-screwdriver, depth gauge ruler
Shirly sump drains
Shunt catheters (A. V.)
Sigmoidoscope with attachments
Silastic finger implant
Skin board for flattening the graft
Snare
Soft tissue set, basic
Stand, single basin
Stapler, hand
Sternal saw
Stopcocks, three-way
Stretcher
Stryker frame
Suction tips and tubing
Surgical diathermy electrodes
Surgical lamp-double, track mounted
Swan-Gantz catheter
Table, operating room w/accessories
Thoracotomy tray-basic
Total hip replacement instruments
Total knee implants and instruments
Tourniquets
Tracheostomy tray
Ultrasonic cleaner
Ultrasound equipment
Ultraviolet lights
Valve dialators
Valvulotomes
Vascular clamps
Vascular clips and applicators
Vascular prosthesis
VCR equipment
Vein strippers
Ventricular needles
Vial-o-jet
Vitrectomy tray
Washer sterilizer
Water pik
Water-seal drainage set (Pleur-a-vac)
X-ray machine, portable

The Georgia Board of Technical and Adult Education does not discriminate
on the basis of age, sex, race, color, religion, national origin, or handicap
in its educational programs, activities, or employment policies.